Project/Site: MVP		City/C	county: Franklin		Sampling Date: 04/06/2016
Applicant/Owner: MVP				State: VA	Sampling Point: W-CD6
Investigator(s): HS,CW,AC		Section	on Township Range N		<u> </u>
Landform (hillslope, terrace, et					Slope (%): 0-3
Subregion (LRR or MLRA): <u>L</u>	RR P				Datum: NAD 83
Soil Map Unit Name: 11A-Co					
Are climatic / hydrologic condit		· ·			
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal	l Circumstances" p	resent? Yes No
Are Vegetation, Soil	, or Hydrology _	naturally problema	atic? (If needed, e	explain any answe	rs in Remarks.)
SUMMARY OF FINDIN	GS – Attach site	e map showing san	pling point location	ons, transects	, important features, etc.
Hudrophytic Vegetation Pres	ent? Yes	No			
Hydrophytic Vegetation Pres Hydric Soil Present?	Yes Yes		Is the Sampled Area		
Wetland Hydrology Present?		No No	within a Wetland?	Yes	No
Remarks: Cowardin C		HGM: Slope	Water Type:	DD\\\\\\\\\	
		•	* *		
Problematic weti	and in active agr	icultural area disturb	ed by pigs and lives	TOCK.	
HYDROLOGY					
Wetland Hydrology Indicat	ors:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum	of one is required; c	heck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)		True Aquatic Plants (	B14)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Par	tterns (B10)
Saturation (A3)			es on Living Roots (C3)	Moss Trim Li	
Water Marks (B1)		Presence of Reduced		-	Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Buri	
Drift Deposits (B3)		Thin Muck Surface (0			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)		tressed Plants (D1)
Iron Deposits (B5)				<u>✓</u> Geomorphic	
Inundation Visible on Ae	,			Shallow Aqui	
Water-Stained Leaves (E	39)				phic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:	Vaa 🗸 Na	Depth (inches):	1		
Surface Water Present?	Yes _ No _	Depth (inches):	<u>'</u>		
Water Table Present?			_		
Saturation Present? (includes capillary fringe)	Yes _ • No _	Depth (inches):	wetiand F	Hydrology Presen	t? Yes <u> </u>
Describe Recorded Data (str	eam gauge, monitori	ng well, aerial photos, pre	vious inspections), if ava	ilable:	
Remarks:					
Top 6" saturated on SiC	l soil surface fro	m stream sheet flow	Not saturated helo	w this soil lave	r where soil annears
more free draining.	2 0011 0411400 110	in diream eneet new	. Not oataratoa bolo	w trilo oon layo	i, where con appears
g					

EGETATION (Four Strata) – Use scientific names of plants.					
		Dominance Test worksho	eet:		
			4		
		That Are OBL, FACW, or F	FAC: 1 (A)		
			4		
		Species Across All Strata:	1 (B)		
		Percent of Dominant Spec	ies		
		That Are OBL, FACW, or F	AC: 100 (A/B		
		Prevalence Index worksh	eet.		
20% of tota	al cover: U				
		·			
		Column Totals:	(A) (B)		
		Prevalence Index -	B/A =		
			· · ·		
0 <sub>= To</sub>	otal Cover				
		·			
			• , , ,		
50	✓ FACW	Problematic Hydrophy	tic Vegetation' (Explain)		
5					
5	FACU				
- — —		<u> </u>	<u> </u>		
		Definitions of Four Veget	ation Strata:		
- — —		Tree - Woody plants, excl	uding vines, 3 in. (7.6 cm) o		
			height (DBH), regardless of		
		neight.			
- — —			lants, excluding vines, less		
			than or equal to 3.28 ft (1		
<u> </u>		III) tall.			
			n-woody) plants, regardless		
		of size, and woody plants i	ess than 3.28 ft tall.		
	al cover: 12	Woody vine – All woody v			
2070 01 1011		moday mile / iii moday i	ines greater than 3.28 ft in		
<u>20</u> /0 01 tot		height.	ines greater than 3.28 ft in		
		_	ines greater than 3.28 ft in		
		_	ines greater than 3.28 ft in		
		_	ines greater than 3.28 ft in		
		_	ines greater than 3.28 ft in		
		height.  Hydrophytic Vegetation			
	otal Cover	height.  Hydrophytic Vegetation	ines greater than 3.28 ft in		
	Absolute Do % Cover Sr	Absolute Species? Status  O = Total Cover 20% of total cover: 0  Total Cover 20% of total cover: 0  FACW 5 FACW 5 FACU  Total Cover 20% of total cover: 0  Total Cover 20% of total cover: 0	Absolute Species? Status    Mumber of Dominant Species That Are OBL, FACW, or Fact Species		

Sampling Point: W-CD6

SOIL

Profile Desc	ription: (Describe	to the dept	h needed to docun	nent the i	ndicator	or confirm	the absenc	e of indicat	ors.)	
Depth	Matrix		Redo	x Features	3					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-6	10YR 4/2	100					SiCL		Satura	ted
6-16	5YR 5/4	100					SiL			
								-		
	-	· <del></del>						-		
		· <del></del>					-	<del></del>		
					-					
	-							-		
¹Type: C=Co	oncentration, D=Dep	letion RM=	Reduced Matrix MS	S=Masked	Sand Gra	ins	<sup>2</sup> Location: 1	PI =Pore I in	ing, M=Matrix	<u> </u>
Hydric Soil		iction, rawi–	reduced Matrix, Me	J-Waskea	Oana Ore					lydric Soils³:
Histosol			Dark Surface	(S7)					(A10) <b>(MLRA</b>	•
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	LRA 147.			e Redox (A16	•
Black Hi			Thin Dark Su		. , .			(MLRA 1		,
	n Sulfide (A4)		Loamy Gleye						oodplain Soils	s (F19)
	Layers (A5)		Depleted Mat	,	,			(MLRA 1	•	` ,
	ick (A10) (LRR N)		Redox Dark S		6)				w Dark Surfac	ce (TF12)
Depleted	Below Dark Surface	e (A11)	Depleted Dar	k Surface	(F7)		<u>~</u>	Other (Expla	ain in Remark	s)
Thick Da	ark Surface (A12)		Redox Depre	ssions (F	3)					
	lucky Mineral (S1) <b>(L</b>	_RR N,	Iron-Mangan	ese Masse	es (F12) <b>(</b> I	_RR N,				
	A 147, 148)		MLRA 13	6)						
Sandy G	lleyed Matrix (S4)		Umbric Surfa	ce (F13) <b>(</b>	MLRA 13	6, 122)	<sup>3</sup> ln	dicators of h	ydrophytic ve	egetation and
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	<b>8)</b> w	etland hydro	ology must be	present,
Stripped	Matrix (S6)		Red Parent N	laterial (F	21) <b>(MLR</b>	A 127, 147	<b>')</b> u	nless disturl	oed or probler	natic.
Restrictive I	_ayer (if observed):									
Type:										
Depth (inc	ches):						Hydric So	il Present?	Yes 🗸	No
Remarks:							1 -		<u> </u>	<u> </u>
	with evidence of	significar	nt soil disturband	e from i	oias and	livestoc	k. Area de	lineated a	as wetland	has clavev
	er 6" that appear									
	w in delineated									9000
10 011001 110	Transaction (	Wolland a		00111140		, o , , , , , ,	aloutivo or	oata.atoa	00	



Photograph Direction South

Comments:		

Project/Site: MVP	City/Co	<sub>ounty:</sub> Franklin		Sampling Date: 04/06/2016
Applicant/Owner: MVP				Sampling Point: W-CD6-UP
	Sectio			
Landform (hillslope, terrace, etc.): Floodplain	Local relie			Slope (%): 0-3
Subregion (LRR or MLRA): LRR P	Lat: 37.057898°			Datum: NAD 83
Soil Map Unit Name: 7D-Clifford fine sandy le				
Are climatic / hydrologic conditions on the site t	pical for this time of year? Ye	es <u> </u>	(If no, explain in R	temarks.)
Are Vegetation, Soil, or Hydrolo	gy significantly disturb	ped? Are "Normal	Circumstances" p	present? Yes No
Are Vegetation, Soil, or Hydrolo				
SUMMARY OF FINDINGS – Attach				
Hydrophytic Vegetation Present? Yes	✓ No_	In the Commission Area		
	No 🗸	Is the Sampled Area within a Wetland?	Yes	No
Wetland Hydrology Present? Yes	No	William a Wolland	.00	
Remarks: Cowardin Code: UPLAND	HGM:	Water Type:		
Agriculture field disturbed by p		71		
righteditate field distarbed by p	go and investook.			ļ
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is require	d: check all that apply)		Surface Soil	
Surface Water (A1)	True Aquatic Plants (E			getated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odd		Drainage Pa	
Saturation (A3)	Oxidized Rhizosphere		Moss Trim L	
Water Marks (B1)	Presence of Reduced	- · · · · · · · · · · · · · · · · · · ·		Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction	` '	Crayfish Bur	
Drift Deposits (B3)	Thin Muck Surface (C		· ·	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Rem			tressed Plants (D1)
Iron Deposits (B5)			Geomorphic	Position (D2)
Inundation Visible on Aerial Imagery (B7)			Shallow Aqu	itard (D3)
Water-Stained Leaves (B9)			Microtopogra	aphic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutral	Test (D5)
Field Observations:	•			
	Depth (inches):			
	Depth (inches):			
	Depth (inches):	Wetland H	lydrology Preser	nt? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, mon	toring well, aerial photos, prev	vious inspections), if ava	ilable:	
	g, p, p	······································		
Remarks:				

#### VEGETATION (Four Strata) - Use scientific names of plants.

\_\_\_\_)

3. Plantago major 5 FACU

5.\_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_

% Cover Species? Status

0 = Total Cover

0 = Total Cover

60 ✓ FACW 5 FACU

70 = Total Cover

0 = Total Cover

0 = 1 otal Cover50% of total cover: 0 = 20% of total cover: 0 = 20%

50% of total cover: 0 20% of total cover: 0

50% of total cover: 35 20% of total cover: 14

50% of total cover: 0 20% of total cover:

30'

Sapling/Shrub Stratum (Plot size: 15' )

2. Trifolium repens

Tree Stratum (Plot size: \_\_\_

Herb Stratum (Plot size: 5'

1. Poa trivialis

	mpling P	oint: <u>\</u>	N-CD6-l	JP
Dominance Test w	orksheet:			
Number of Dominar That Are OBL, FAC	it Species W, or FAC:		1	_ (A)
Total Number of Do Species Across All S			1	_ (B)
Percent of Dominan That Are OBL, FAC			100	_ (A/B)
Prevalence Index v	vorksheet:			
Total % Cover of	of:	Mι	ıltiply by:	
FACW species				
		_		
		_		
Column Totals:	(	(A)		(B)
Prevalence Inc	dex = B/A	_		
Hydrophytic Veget			1	
1 - Rapid Test f				
		-	egetation	
2 - Dominance				
3 - Prevalence				
4 - Morphologic				
data in Rem				
Problematic Hy	drophytic V	egetat	ion¹ (Expl	ain)
<sup>1</sup> Indicators of hydric be present, unless of	soil and we	etland proble	hydrology ematic.	must
Definitions of Four	Vegetatio	n Stra	ta:	
Tree – Woody plant	s. excludin	g vines	s, 3 in. (7.6	S cm) oi
more in diameter at height.	breast heig	tht (DE	ori), regan	dless of
	breast heig	s, excl	uding vine	dless of s, less
height.  Sapling/Shrub – W than 3 in. DBH and	breast heig oody plants greater tha	s, excl n or ed	uding vine qual to 3.2 blants, reg	dless of s, less 8 ft (1
height.  Sapling/Shrub – W than 3 in. DBH and m) tall.  Herb – All herbaced	oody plants greater tha ous (non-woolants less	s, exclor n or ed body) p than 3	uding vine qual to 3.2 plants, reg .28 ft tall.	s, less 8 ft (1 ardless

Remarks: (Include photo numbers here or on a separate sheet.)	Remarks: (	Include pho	to numbers	here or on	a separat	e sheet.)
---	------------	-------------	------------	------------	-----------	-----------

Vegetation disturbed by pigs and livestock.

Woody Vine Stratum (Plot size: 15')

Depth	ription: (Describe) Matrix	o the depth	needed to document the indicator or or Redox Features	confirm the ab	sence of indicato	ors.)	
(inches)	Color (moist)	%	Color (moist) % Type <sup>1</sup> L	_oc² Tex	ture	Remarks	
0-3	7.5YR 4/3	100		S	iL		
3-18	7.5YR 5/6	100			 SL		
	7.10 1.11 0.70						
					<del></del>		
	-				<del></del> -		
					<del></del>		
Type: C=C	oncentration, D=Dep	etion, RM=Re	educed Matrix, MS=Masked Sand Grains	s. <sup>2</sup> Locat	tion: PL=Pore Lini	ng, M=Matrix	ζ.
Hydric Soil		,	,		Indicators for Pr		
Histosol	(A1)		Dark Surface (S7)		2 cm Muck (/	A10) <b>(MLRA</b>	147)
	pipedon (A2)		Polyvalue Below Surface (S8) (MLR	A 147, 148)	Coast Prairie	, .	•
Black Hi	stic (A3)		Thin Dark Surface (S9) (MLRA 147,	148)	(MLRA 14	7, 148)	
	n Sulfide (A4)		Loamy Gleyed Matrix (F2)		Piedmont Flo		s (F19)
	d Layers (A5)		Depleted Matrix (F3)		(MLRA 13		
	ick (A10) <b>(LRR N)</b>	(0.4.4)	Redox Dark Surface (F6)		Very Shallow		, ,
	d Below Dark Surface ark Surface (A12)	e (A11)	<ul><li>Depleted Dark Surface (F7)</li><li>Redox Depressions (F8)</li></ul>		Other (Expla	in in Remark	S)
	firk Surface (A12) fucky Mineral (S1) <b>(L</b>	RR N	Iron-Manganese Masses (F12) (LRI	R N			
	147, 148)	,	MLRA 136)	ν,			
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 1	122)	<sup>3</sup> Indicators of h	ydrophytic ve	getation and
	ledox (S5)		Piedmont Floodplain Soils (F19) (MI		wetland hydro		-
	Matrix (S6)		Red Parent Material (F21) (MLRA 1		unless disturb		
Restrictive I	_ayer (if observed):						
Type:			<u>_</u>				
Depth (inc	ches):			Hydr	ic Soil Present?	Yes	No
Remarks:				l			
Soil disturb	ed by livestock a	and pias.					
	,						

Project/Site: MVP	City/C	<sub>ounty:</sub> Franklin	Sampling Date: 04/06/2016
Applicant/Owner: MVP	State: VA	Sampling Point: W-CD5	
Investigator(s): HS,CW,AC	Section		
Landform (hillslope, terrace, etc.): Flood		ef (concave, convex, none): Conca	ave Slope (%): 0-3
Subregion (LRR or MLRA): LRR P	1 at: 37.055451	Long: -79.910614	
Soil Map Unit Name: 8E-Clifford-Hickory			
Are climatic / hydrologic conditions on the			•
Are Vegetation, Soil, or Hy			
Are Vegetation, Soil, or Hy	drology naturally problema	atic? (If needed, explain any a	nswers in Remarks.)
SUMMARY OF FINDINGS – Atta	ach site map showing sam	pling point locations, trans	ects, important features, etc.
Hydrophytic Vegetation Present?	Yes No	to the Committee of America	
Hydric Soil Present?	Yes No	Is the Sampled Area within a Wetland? Yes _	✓ No
Wetland Hydrology Present?	Yes No	Within a Wenana: 100_	140
Remarks: Cowardin Code: PFO	HGM: Riverine	Water Type: RPWWN	
Adjacent to S-CD6		, , , , , , , , , , , , , , , , , , ,	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)
Primary Indicators (minimum of one is re	auired: check all that apply)		e Soil Cracks (B6)
Surface Water (A1)	True Aquatic Plants (		ly Vegetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Od		ge Patterns (B10)
Saturation (A3)			rim Lines (B16)
Water Marks (B1)	Presence of Reduced		ason Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reductio		h Burrows (C8)
Drift Deposits (B3)	Thin Muck Surface (C		ion Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Rer		or Stressed Plants (D1)
Iron Deposits (B5)	<del>_</del> \ \ \ \ \		rphic Position (D2)
Inundation Visible on Aerial Imagery	(B7)	<del>-</del>	v Aquitard (D3)
✓ Water-Stained Leaves (B9)			pographic Relief (D4)
Aquatic Fauna (B13)			eutral Test (D5)
Field Observations:			
	No Depth (inches):	6	
Water Table Present? Yes	No Depth (inches):	4	
Saturation Present? Yes	No Depth (inches):	0 Wetland Hydrology P	resent? Yes <u> </u>
(includes capillary fringe)  Describe Recorded Data (stream gauge,	monitoring well, aerial photos, pre	vious inspections). if available:	
, , ,			
Remarks:			

#### **VEGETATION (Four Strata) - Use scientif**

Tree Stratum (Plot size: 30')

Sapling/Shrub Stratum (Plot size: 15' 1. Lindera benzoin\_\_\_\_

Herb Stratum (Plot size: 5' )

2. Liriodendron tulipifera 3. Fraxinus pensylvanicum

1. Acer negundo

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
)		Species?		Number of Dominant Species	0	
	<del>40</del> 20		FAC	That Are OBL, FACW, or FAC:	2	(A)
	<u></u> 5		FACU	Total Number of Dominant	0	
		-	FACW_	Species Across All Strata:	3	(B)
				Percent of Dominant Species That Are OBL, FACW, or FAC:	67	(A/B)
				Prevalence Index worksheet:		
	65	= Total Cov		Total % Cover of:	Multiply by:	
50% of total cover: 32.5		total cover:	4.0	OBL species >	x 1 =	_
15' )		total cover.		FACW species>	2 =	_
/	50	~	FAC	FAC species>	3 =	_
				FACU species >	: 4 =	_
				UPL species >	x 5 =	_
				Column Totals: (A	۹)	(B)
				Broyolongo Indox — B/A -	_	
				Prevalence Index = B/A =		_
				Hydrophytic Vegetation Indic  1 - Rapid Test for Hydrophy		
				2 - Dominance Test is >50°	=	
_				3 - Prevalence Index is ≤3.		
	50	= Total Cov	er	4 - Morphological Adaptation		nortin
50% of total cover: 25	20% of	total cover:	10	data in Remarks or on a		
)				Problematic Hydrophytic Ve		
				1 Toblematic Hydrophytic Vi	egetation (Expla	<i>)</i>
				<sup>1</sup> Indicators of hydric soil and we be present, unless disturbed or		must
				Definitions of Four Vegetation	n Strata:	
				Tree – Woody plants, excluding	uvinos 2 in /76	cm) or
				more in diameter at breast heig		
				height.		
				Sapling/Shrub – Woody plants than 3 in. DBH and greater than m) tall.		
				Herb – All herbaceous (non-wo	ody) plants rega	ırdless
	0 :	= Total Cov	er	of size, and woody plants less t		41000
50% of total cover:0	20% of	total cover:	0	Woody vine – All woody vines	areater than 3.28	R ft in
)				height.	greater than 6.20	,
				Hydrophytic		
				Vegetation		
_		= Total Cov	^	Present? Yes	_ No	
50% of total cover: 0	20% of	total cover:	. 0			

Remarks: (Include photo numbers here or on a separ

Woody Vine Stratum (Plot size: 15')

Sampling Point: W-CD5

SOIL

Depth	Matrix			K Features	1 . 2	<u> </u>			
(inches) 0-8	Color (moist) 5YR 4/2	<u>%</u> 80	Color (moist) 5YR 5/6		ype <sup>1</sup> Loc <sup>2</sup>	Texture SiL		Remarks	
	3	· <del></del> -	3 f H 3/6		, IVI		·		
8-16	5YR 5/6	100				SiL			
						_			
						<u> </u>			
		· ——				<u> </u>			
	-								
		· <u> </u>							
Type: C=Co	oncentration, D=Dep	letion, RM=F	Reduced Matrix, MS	S=Masked Sa	nd Grains.	<sup>2</sup> Location: F	PL=Pore Lin	ing, M=Matrix.	
lydric Soil I								roblematic Hy	
Histosol			Dark Surface	(S7)		2	2 cm Muck (	A10) <b>(MLRA 1</b>	47)
	pipedon (A2)				S8) (MLRA 14			e Redox (A16)	
Black Hi					LRA 147, 148		(MLRA 14		(E40)
	n Sulfide (A4) I Layers (A5)		Loamy Gleye Depleted Mat			۱	ledmont Fi MLRA 13)	oodplain Soils	(F19)
	ck (A10) <b>(LRR N)</b>		Redox Dark S			,		v Dark Surface	(TF12)
	Below Dark Surface	e (A11)	Depleted Dar	, ,	7)		•	in in Remarks	. ,
	ark Surface (A12)	` ,	Redox Depre		,		` .	•	,
	lucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangane		F12) <b>(LRR N,</b>				
	147, 148)		MLRA 130	•		3.			
	leyed Matrix (S4)		Umbric Surfa					ydrophytic veg	
	edox (S5) Matrix (S6)				(F19) (MLRA (MLRA 127, 1			ology must be posed or problem	
	_ayer (if observed):		Red r arent iv	iateriai (i 2 i)	(WILKA 127, 1	47) ui	iless distuit	ed of problem	allo.
Type:	, (,-								
	ches):					Hydric Soi	I Present?	Yes_	No
emarks:						1.7			



Photograph Direction East

Comments:			

Project/Site: MVP	City/County: Franklin	Sampling Date: 04/06/2016
Applicant/Owner: MVP		State: VA Sampling Point: W-CD5-UP
	Section, Township, Range: N	
Landform (hillslope, terrace, etc.): Floodplain		
Subregion (LRR or MLRA): LRR P	27 055689° Long: -79	9.910803° Datum: NAD 83
	complex, 25 to 45 percent slopes	
	_	
	oical for this time of year? Yes No	
	y significantly disturbed? Are "Norma	al Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	y naturally problematic? (If needed,	explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach si	ite map showing sampling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes _	No Is the Sampled Area	
	No V Is the Sampled Area	Yes No
	No within a Wetland?	res NO
Remarks: Cowardin Code: UPLAND		
	TIOW.	
Plowed hayfield		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required;	****	Surface Soil Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3)	
Water Marks (B1) Sediment Deposits (B2)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Drift Deposits (B3)	<ul><li>Recent Iron Reduction in Tilled Soils (C6)</li><li>Thin Muck Surface (C7)</li></ul>	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Other (Explain in Nemano)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (B9)		Microtopographic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No _	Depth (inches):	
Water Table Present? Yes No	Depth (inches):	
Saturation Present? Yes No _		Hydrology Present? Yes No
(includes capillary fringe)	pring well, aerial photos, previous inspections), if av	oilabla
Describe Recolded Data (Stream gauge, monito	offing well, aerial priotos, previous inspections, ii ava	allable:
Remarks:		

#### VEGETATION (Four Strata) - Use scientific names of plants.

30'

Sapling/Shrub Stratum (Plot size: 15' )

2. Allium cernuum

3. Viola sororia

Tree Stratum (Plot size: \_\_

Herb Stratum (Plot size: 5'

1. Poa trivialis

\_\_\_\_)

5.\_\_\_\_\_ \_\_\_ \_\_\_\_\_

% Cover Species? Status

= Total Cover

0 = Total Cover

80 FACW

5 FACU 5 FAC

90 = Total Cover

0 = Total Cover

50% of total cover: 0 20% of total cover: 0

50% of total cover: 0 20% of total cover: 0

50% of total cover: 45 20% of total cover: 18

50% of total cover: 0 20% of total cover: 0

Sampling P	oin	t: <u>W-</u>	CD5-U	<u>P</u>
Dominance Test worksheet:				
Number of Dominant Species That Are OBL, FACW, or FAC	: _		1	(A)
Total Number of Dominant Species Across All Strata:	_		1	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC	: <u>_</u>	1(	00	(A/B)
Prevalence Index worksheet	:			
Total % Cover of:		Multip	ly by:	
OBL species				
FACW species				
UPL species				
Column Totals:	(A)			(B)
Prevalence Index = B/A	=			
Hydrophytic Vegetation Indi	cato	rs:		
1 - Rapid Test for Hydroph			tation	
✓ 2 - Dominance Test is >50	-	vege	tation	
3 - Prevalence Index is ≤3				
		1 (5		
4 - Morphological Adaptat				porting
data in Remarks or on				
Problematic Hydrophytic \	/ege	tation	' (Expla	in)
<sup>1</sup> Indicators of hydric soil and w be present, unless disturbed o	etlar r pro	nd hyd oblema	drology r atic.	must
Definitions of Four Vegetation	n S	trata:		
<b>Tree</b> – Woody plants, excluding more in diameter at breast height.	g vir ght (	nes, 3 DBH)	in. (7.6 , regard	cm) or less of
Sapling/Shrub – Woody plant than 3 in. DBH and greater tha m) tall.				
<b>Herb</b> – All herbaceous (non-word size, and woody plants less				rdless
<b>Woody vine</b> – All woody vines height.	gre	ater th	nan 3.28	3 ft in

Remarks: (Include photo numbers here or on a separate sheet.)

Woody Vine Stratum (Plot size: \_\_\_\_15' \_\_\_\_)

		o the depth	needed to document the indicator of	r confirm the a	bsence of indicate	ors.)	
Depth (inches)	Matrix Color (moist)	<u></u> %	Redox Features  Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup> Te	xture	Remarks	
0-12	5YR 5/6	100			SiL		
12-18	7.5YR 5/6	100			 SiL		
12-10	7.5111.5/0	100			<u> </u>		
	-						
		etion, RM=Re	educed Matrix, MS=Masked Sand Gra	ins. <sup>2</sup> Loc	ation: PL=Pore Lini		
Hydric Soil I	ndicators:				Indicators for P	roblematic Hy	ydric Soils³:
Histosol			Dark Surface (S7)			A10) <b>(MLRA</b> 1	•
	pipedon (A2)		Polyvalue Below Surface (S8) (M			e Redox (A16)	
Black Hi			Thin Dark Surface (S9) (MLRA 14	17, 148)	(MLRA 14		(F40)
	n Sulfide (A4) I Layers (A5)		<ul><li>Loamy Gleyed Matrix (F2)</li><li>Depleted Matrix (F3)</li></ul>		Pleamont Fig (MLRA 13	oodplain Soils	(F19)
	ick (A10) <b>(LRR N)</b>		Redox Dark Surface (F6)			v Dark Surface	(TF12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)			in in Remarks	
	ark Surface (A12)	` ,	Redox Depressions (F8)				•
	lucky Mineral (S1) <b>(L</b>	RR N,	Iron-Manganese Masses (F12) (L	RR N,			
	A 147, 148)		MLRA 136)		2		
	sleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136		<sup>3</sup> Indicators of h		
	edox (S5)		Piedmont Floodplain Soils (F19) (		wetland hydro		
	Matrix (S6)  -ayer (if observed):		Red Parent Material (F21) (MLRA	127, 147)	unless disturb	ed of problem	ialic.
Type:	zayer (ii observea).						
	ches):		_	Нус	Iric Soil Present?	Yes	No 🗸
Remarks:			<del>-</del>	11190	inc don't resent:		
Nemarks.							

Project/Site: MVP	City/C	county: Franklin		Sampling Date: 08/29/2016
Applicant/Owner: MVP		,	State: VA	Sampling Point: W-EF48
Investigator(s): D Hadersbeck, S Therk				
	Local reli	·		Slope (%): 2-4
Subregion (LRR or MLRA): LRR P				Datum: NAD 83
Soil Map Unit Name: 7D-Clifford fine sandy				
Are climatic / hydrologic conditions on the site	e typical for this time of year? Y	res No	(If no, explain in Re	marks.)
Are Vegetation, Soil, or Hydro	ology significantly distur	bed? Are "Normal	Circumstances" pr	esent? Yes No
Are Vegetation, Soil, or Hydro				
SUMMARY OF FINDINGS – Attach				
Hydrophytic Vegetation Present? Yes	es No	Is the Compled Area		
Hydric Soil Present? Ye	es <u>/</u> No	Is the Sampled Area within a Wetland?	Yes 🗸	No
Wetland Hydrology Present? Ye	es <u>/</u> No			
Remarks: Cowardin Code: PEM	HGM: Riverine	Water Type:	RPWWD	
Wetland sourced from				
HYDROLOGY				
Wetland Hydrology Indicators:				ors (minimum of two required)
Primary Indicators (minimum of one is require			Surface Soil C	
Surface Water (A1)	True Aquatic Plants (			etated Concave Surface (B8)
High Water Table (A2) Saturation (A3)	<ul><li>Hydrogen Sulfide Od</li><li>Oxidized Rhizosphere</li></ul>		Drainage Patt Moss Trim Lin	
Water Marks (B1)	Presence of Reduced	= ' '		/ater Table (C2)
Sediment Deposits (B2)	Recent Iron Reductio	` '	Crayfish Burro	
Drift Deposits (B3)	Thin Muck Surface (C		-	ible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Rer			essed Plants (D1)
Iron Deposits (B5)			Geomorphic F	
Inundation Visible on Aerial Imagery (B)	7)		Shallow Aquita	
Water-Stained Leaves (B9)	,			phic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutral 7	
Field Observations:				
	No Depth (inches):			
	No Depth (inches):			
	No Depth (inches):	Wetland H	lydrology Present	? Yes <u>/</u> No
(includes capillary fringe)  Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, pre	vious inspections), if ava	ilable:	
, , ,				
Remarks:				

EGETATION (Four Strata) – Use scientific n	ames of	plants.		Sampling Point: W-EF48
201	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30' ) 1)		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. 3.				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				,
7				Prevalence Index worksheet:
	0	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:0	20% of	total cover	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1				FAC species x 3 =
2.				FACU species x 4 =
3.		-		UPL species x 5 =
				Column Totals: (A) (B)
4		-		
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov	_	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 0	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5')				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Leersia oryzoides	50		OBL	1 Toblematic Trydrophytic Vegetation (Explain)
2. Impatiens capensis	25		FACW_	1 Indicators of hydric coil and watland hydrology must
3. Cyperus esculentus	20		F <u>ACW</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<sub>4.</sub> Cicuta maculata	5		OBL	Definitions of Four Vegetation Strata:
<sub>5.</sub> Vernonia noveboracensis	5		FACW_	John Mondon Four Pogotation Official
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7.				more in diameter at breast height (DBH), regardless of height.
8.				g.m
9.				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				
11	105			Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: <u>52.</u> .	100 s	= Total Cov	er . 21	of size, and woody plants less than 3.28 ft tall.
4 F1	<u>J</u> 20% 01	total cover		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15 )				height.
1				
2				
3				
4				Hydrophytic
5				Vegetation
	0	= Total Cov	er	Present? Yes V No No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Sampling Point: W-EF48

SOIL

Depth (inches)   Color (moist)   %   Color (moist)   %   Type¹   Loc²   Texture   Remarks
0-2 7.5yr 3/1 100 SL
2-12 7.5yr 4/2 85 7.5yr 5/6 15 C M/PL SL
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16)
Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19)
Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147)
2 cm Muck (A10) <b>(LRR N)</b>
Depleted Below Bark Surface (ATT)
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,
MLRA 147, 148) MLRA 136)
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) <sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present,
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic.
Restrictive Layer (if observed):
Type: Course Fragments
Depth (inches): 12 Hydric Soil Present? Yes V No
Remarks:



Photograph Direction WNW

Comments:		

Project/Site: MVP		City/C	ounty: Franklin		Sampling Date: 08/29/2016
Applicant/Owner: MVP			,		Sampling Point: W-EF48-UF
Investigator(s): D Hadersbeck, S	Therkildson,	K Pulver Section	on, Township, Range: N/		<u> </u>
Landform (hillslope, terrace, etc.): Sw					Slone (%): 2-4
Subregion (LRR or MLRA): LRR P					Datum: NAD 83
Soil Map Unit Name: 7D-Clifford fine					
Are climatic / hydrologic conditions on t		•			
Are Vegetation, Soil, or	Hydrology	significantly distur	bed? Are "Normal	Circumstances" p	present? Yes No
Are Vegetation, Soil, or	Hydrology	naturally problema	atic? (If needed, e	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - A	Attach site m	nap showing sam	pling point location	ns, transects	, important features, etc.
Hydrophytic Vegetation Present?	Yes	No. 🗸			
Hydric Soil Present?	Yes		Is the Sampled Area	V	No 🗸
Wetland Hydrology Present?			within a Wetland?	res	NO
Remarks: Cowardin Code: UI	PLAND	HGM:	Water Type:		
HYDROLOGY				Casandam, Indiaa	to a facini a series al
Wetland Hydrology Indicators:					tors (minimum of two required)
Primary Indicators (minimum of one is	-		D4.4)	Surface Soil	
Surface Water (A1)		True Aquatic Plants (			getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od	or (C1) es on Living Roots (C3)	Drainage Pat	
<pre> Saturation (A3) Water Marks (B1)</pre>	_	Presence of Reduced		Moss Trim Li	Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Buri	
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rer			tressed Plants (D1)
Iron Deposits (B5)		С (=. ф	····················	Geomorphic	
Inundation Visible on Aerial Imag	jery (B7)			Shallow Aqui	
Water-Stained Leaves (B9)					phic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	
Field Observations:					
		Depth (inches):			
Water Table Present? Yes _	No	Depth (inches):			
	No	Depth (inches):	Wetland H	lydrology Presen	it? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gau	ae. monitorina	well, aerial photos, pre	vious inspections), if ava	ilable:	
3	3-7 3	, ,, ,	.,,		
Remarks:					

#### **VEGETATION** (Four Strata) – Use scientific names of plants.

Sampling Point: W-EF48-UP

Tree Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:		
Tree Stratum (Frot Size.		Species?		Number of Dominant Species	0	
1				That Are OBL, FACW, or FAC:	0	(A)
2				Total Number of Dominant		
3				Species Across All Strata:	1	(B)
4				5 . (5		
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)
6				matrice GBE, Trieve, of Tries.		(700)
7				Prevalence Index worksheet:		
·· <del></del>		= Total Cove		Total % Cover of:	Multiply by:	
50% of total cover: 0				OBL species x	1 =	_
Sapling/Shrub Stratum (Plot size: 15' )				FACW species x 2	2 =	_
1				FAC species x:	3 =	_
				FACU species x		
2				UPL species x :		
3				Column Totals: (A)		
4				Column Totals (7)	,	_ (D)
5				Prevalence Index = B/A =		_
6				Hydrophytic Vegetation Indicate	tors:	
7				1 - Rapid Test for Hydrophyt		
8				2 - Dominance Test is >50%		
9				3 - Prevalence Index is ≤3.0		
	0	= Total Cove	er	4 - Morphological Adaptation		norting
50% of total cover:0	20% of	total cover:	0			porting
Herb Stratum (Plot size: 5'				data in Remarks or on a s	. ,	,
1. Glycine max	100		UPL	Problematic Hydrophytic Veg	getation (Explai	n)
2						
3				<sup>1</sup> Indicators of hydric soil and wetl		nust
4				be present, unless disturbed or p		
5				Definitions of Four Vegetation	Strata:	
				Tree - Woody plants, excluding	vines, 3 in. (7.6	cm) or
6				more in diameter at breast height	t (DBH), regardl	ess of
7				height.		
8				Sapling/Shrub – Woody plants,		
				than 3 in. DBH and greater than	or equal to 3.28	ft (1
10				m) tall.		
11	400			Herb - All herbaceous (non-woo		rdless
	100	= Total Cove	er	of size, and woody plants less that	an 3.28 ft tall.	
50% of total cover: <u>50</u>	20% of	total cover:	20	Woody vine – All woody vines g	reater than 3.28	ft in
Woody Vine Stratum (Plot size: 15')				height.		
1						
2						
3						
4				Hydrophytic		
5				Vegetation		
	0 :	= Total Cove	er	Present? Yes	No 🔽	
50% of total cover: 0	20% of	total cover:	0			
Remarks: (Include photo numbers here or on a separate s	neet.)			I.		

Profile Desc	ription: (Describe t	o the depth i	needed to docun	nent the in	ndicator o	or confirm	the abs	ence of indicate	ors.)	
Depth	Matrix		Redo	x Features						
(inches)	Color (moist)		Color (moist)	<u></u> %	Type <sup>1</sup>	Loc <sup>2</sup>	Textu		Remarks	
0-12	10yr 5/8	100					Sa	<u>L</u>		
			_			-				·
								<u> </u>		
	oncentration, D=Deple	etion, RM=Re	educed Matrix, MS	S=Masked	Sand Gra	ins.		on: PL=Pore Lini		
Hydric Soil I	ndicators:						I	Indicators for P	roblematic H	ydric Soils³:
Histosol			Dark Surface				-		A10) <b>(MLRA</b>	•
	pipedon (A2)		Polyvalue Be				148)		Redox (A16)	)
Black Hi		•	Thin Dark Su			47, 148)		(MLRA 14		(540)
	n Sulfide (A4) I Layers (A5)	•	Loamy Gleye		-2)		-		oodplain Soils	s (F19)
	ck (A10) <b>(LRR N)</b>	•	Depleted Material Redox Dark \$ 100.		3)			(MLRA 13	v Dark Surfac	۵ (TF12)
	Below Dark Surface	(A11)	Depleted Dar				-		in in Remarks	, ,
	rk Surface (A12)		Redox Depre				-	` '		,
Sandy M	lucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangan	ese Masse	s (F12) <b>(l</b>	_RR N,				
	147, 148)		MLRA 13							
	leyed Matrix (S4)		Umbric Surfa					<sup>3</sup> Indicators of h		-
	edox (S5)	•	Piedmont Flo					wetland hydro		•
	Matrix (S6)		Red Parent N	Material (F2	21) <b>(MLR</b> /	A 127, 147	7)	unless disturb	ed or problen	natic.
	ayer (if observed):									
Type:			_							
	ches):						Hydric	Soil Present?	Yes	No
Remarks:										

Project/Site: MVP	City/Count	<sub>y:</sub> Franklin	Sampling Date: 04/05/2016
Applicant/Owner: MVP		State	· VA Sampling Point: W-CD1
	Section, T		
Landform (hillslope, terrace, etc.): Flat			oncave Slope (%): 3-5
Subregion (LRR or MLRA): LRR P	,		5 Datum: NAD 83
Soil Map Unit Name: 7D-Clifford fine sandy lo			
Are climatic / hydrologic conditions on the site ty			
-			
Are Vegetation, Soil, or Hydrolog			
Are Vegetation, Soil, or Hydrolog			any answers in Remarks.)
SUMMARY OF FINDINGS – Attach	site map showing sampli	ng point locations, tr	ansects, important features, etc.
Hydrophytic Vegetation Present? Yes	<u> </u>	he Sampled Area	
Hydric Soil Present? Yes	✓ No.		∕es ✔ No
Wetland Hydrology Present? Yes			
Remarks: Cowardin Code: PFO	HGM: Slope	Water Type: RPWV	VD
Abuts S-CD1, S-CD2, and S-CD3.			
HYDROLOGY			
Wetland Hydrology Indicators:		Second	dary Indicators (minimum of two required)
Primary Indicators (minimum of one is required	l; check all that apply)		urface Soil Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14)		parsely Vegetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C	_	ainage Patterns (B10)
Saturation (A3)	Oxidized Rhizospheres or		oss Trim Lines (B16)
Water Marks (B1)	Presence of Reduced Iron		y-Season Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in	Tilled Soils (C6) Cr	ayfish Burrows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7)	Sa	aturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remark	s) Sto	unted or Stressed Plants (D1)
Iron Deposits (B5)		<u>✔</u> Ge	eomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Sh	nallow Aquitard (D3)
✓ Water-Stained Leaves (B9)			crotopographic Relief (D4)
Aquatic Fauna (B13)		<u>•</u> FA	AC-Neutral Test (D5)
Field Observations:	4		
Surface Water Present? Yes No	Depth (inches):	_	
	Depth (inches):		.4
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	_ Wetland Hydrolo	gy Present? Yes No
Describe Recorded Data (stream gauge, moni	oring well, aerial photos, previou	s inspections), if available:	
Remarks:			
Remarks.			

#### VEGETATION (Four Strata) - Use scientific names of plants.

2 Liriodendron tulipifera

Sapling/Shrub Stratum (Plot size: 15')

20

25

50% of total cover: 35 20% of total cover: 14

50% of total cover: \_\_2.5

70 = Total Cover

5 = Total Cover

5 \_ \_\_\_\_

80 = Total Cover

= Total Cover

20% of total cover:

15

30

50% of total cover: 40 20% of total cover: 16

0

20% of total cover: 1

ND

FAC

FAC

FAC

<u>FAC</u>

Tree Stratum (Plot size:

1. Acer rubrum

3. Nyssa sylvatica

1 Lindera benzoin

Herb Stratum (Plot size: \_

2. Juncus effusus

4. Microstegium vimineum

10.\_\_\_\_

Woody Vine Stratum (Plot size: 15'

1. Poa trivialis

3. Carex sp

Sampling Point: W-CD1 Dominant Indicator Dominance Test worksheet: % Cover Species? Status **Number of Dominant Species** 5\_\_\_\_(A) That Are OBL, FACW, or FAC: FACU **Total Number of Dominant** 6 \_ (B) Species Across All Strata: Percent of Dominant Species 83 (A/B) That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: \_\_\_\_ x 1 = \_\_\_\_ OBL species FACW species \_\_\_\_\_ x 2 = \_\_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ FACU species \_\_\_\_\_ x 4 = \_\_\_\_ UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: \_\_\_\_\_ (A) \_\_\_\_ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: \_\_ 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 \_\_\_ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) ✓ FACW **FACW** <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata:** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Yes V No \_\_\_\_ Present?

Remarks: (Include photo numbers here or on a separate she	Remarks:	(Include photo	numbers	here or on	a separate	sheet.)
---	----------	----------------	---------	------------	------------	---------

5. Lonicera japonica \_\_\_\_\_

Carex not identified to species and not used in dominance test. ND=not determined.

50% of total cover: 0

Sampling Point: W-CD1

SOIL

Profile Desc	ription: (Describe t	o the depth	needed to docum	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	k Features	31		_	
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-5	7.5YR 4/4	100					SiL	
5-18	7.5YR 6/1	70	7.5YR 6/8	30_	С	M	CSi	
			_		'			
					-			
					-			
<sup>1</sup> Type: C=Ce	oncentration, D=Depl	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indica	ators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Bel	low Surfac	ce (S8) <b>(N</b>	ILRA 147,	<b>148)</b> C	Coast Prairie Redox (A16)
Black Hi			Thin Dark Su			47, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		F2)		P	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat		0)			(MLRA 136, 147)
	ick (A10) <b>(LRR N)</b> d Below Dark Surface	(//11)	Redox Dark S Depleted Dar					ery Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ark Surface (A12)	(Δ11)	Redox Depre		. ,			oner (Explain in Nemarks)
	lucky Mineral (S1) <b>(L</b>	RR N.	Iron-Mangane			LRR N.		
	A 147, 148)	,	MLRA 136		, ,	,		
	Bleyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	<sup>3</sup> Ind	licators of hydrophytic vegetation and
Sandy R	Redox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	<b>8)</b> we	etland hydrology must be present,
	Matrix (S6)		Red Parent M	faterial (F	21) <b>(MLR</b>	A 127, 147	<b>')</b> un	less disturbed or problematic.
Restrictive I	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes V No No
Remarks:								



Photograph Direction North

Comments:		

Project/Site: MVP	City/County:	Franklin	Sampling Date: 04/05/2016					
Applicant/Owner: MVP		State: VA						
Investigator(s): HA,CW, AC								
Landform (hillslope, terrace, etc.): Hillslope		· -	r Slope (%): 5-8					
Subregion (LRR or MLRA): LRR P			Datum: NAD 83					
Soil Map Unit Name: 7D-Clifford fine sandy lo								
Are climatic / hydrologic conditions on the site ty	pical for this time of year? Yes	No (If no, explai	n in Remarks.)					
Are Vegetation, Soil, or Hydrolog	significantly disturbed?	Are "Normal Circumstan	ces" present? Yes No					
Are Vegetation, Soil, or Hydrolog								
SUMMARY OF FINDINGS – Attach								
Hydrophytic Vegetation Present? Yes	No V	· <u>·</u>						
	No. V	Sampled Area	No					
	No Withir	a Wetland? Yes _	No					
Remarks: Cowardin Code: UPLAND	L	Water Type:						
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)					
Primary Indicators (minimum of one is required	l; check all that apply)	· · · · · · · · · · · · · · · · · · ·	e Soil Cracks (B6)					
Surface Water (A1)	True Aquatic Plants (B14)		ly Vegetated Concave Surface (B8)					
High Water Table (A2)	Hydrogen Sulfide Odor (C1)		ge Patterns (B10)					
Saturation (A3)	Oxidized Rhizospheres on Li		rim Lines (B16)					
Water Marks (B1)	Presence of Reduced Iron (C	(24) Dry-Se	ason Water Table (C2)					
Sediment Deposits (B2)	Recent Iron Reduction in Till	ed Soils (C6) Crayfis	Crayfish Burrows (C8)					
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturat	Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted	Stunted or Stressed Plants (D1)					
Iron Deposits (B5)		Geomo	Geomorphic Position (D2)					
Inundation Visible on Aerial Imagery (B7)		Shallov	v Aquitard (D3)					
Water-Stained Leaves (B9)			Microtopographic Relief (D4)					
Aquatic Fauna (B13)		FAC-N	eutral Test (D5)					
Field Observations:	<b>V</b> 5 4 6 4 3							
	Depth (inches):							
	Depth (inches):	<u>-</u>						
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	Wetland Hydrology P	resent? Yes No					
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous in	spections), if available:						
Remarks:								
Remarks.								

#### **VEGETATION** (Four Strata) – Use scientific names of plants.

Sampling Point: W-CD1-UP

Troo Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:		
Tiee Stratum (Flot size)		Species?		Number of Dominant Species		
1. Liriodendron tulipifera	10		FACU_	That Are OBL, FACW, or FAC:	1	(A)
2. Tilia americana	10		<u>FACU</u>	Total Number of Dominant		
3				Species Across All Strata:	3	(B)
4				·		(-)
				Percent of Dominant Species	22	
5				That Are OBL, FACW, or FAC:	33	(A/B)
6				Prevalence Index worksheet:		
7					Maritim Ira harr	
	20	= Total Cov	ver .	Total % Cover of:		
50% of total cover: 10	20% of	total cover	: <u>4</u>	OBL species x	1 =	_
Sapling/Shrub Stratum (Plot size: 15' )				FACW species x	2 =	_
1				FAC species x	3 =	_
				FACU species x	4 =	
2				UPL species x		
3						
4				Column Totals: (A	)	_ (B)
5				Dravalance Index D/A		
6				Prevalence Index = B/A =		_
				Hydrophytic Vegetation Indica		
7				1 - Rapid Test for Hydrophyt	ic Vegetation	
8			<del></del>	2 - Dominance Test is >50%	)	
9		-		3 - Prevalence Index is ≤3.0	1	
		= Total Cov		4 - Morphological Adaptation		nortina
50% of total cover:0	20% of	total cover	:0			porting
Herb Stratum (Plot size: 5' )				data in Remarks or on a s	• /	
1. Poa trivialis	75	<b>~</b>	FACW	Problematic Hydrophytic Veg	getation' (Expla	in)
2. Taraxacum officionale	5		FACU			
		-		<sup>1</sup> Indicators of hydric soil and wetl	and hydrology r	nust
3				be present, unless disturbed or p		
4				Definitions of Four Vegetation	Strata:	
5						
6				Tree – Woody plants, excluding		
				more in diameter at breast height height.	t (DBH), regardi	ess of
7				neight.		
8		-	<del></del>	Sapling/Shrub – Woody plants,	excluding vines	, less
9				than 3 in. DBH and greater than	or equal to 3.28	ft (1
10				m) tall.		
11				Herb – All herbaceous (non-woo	dv) plants rega	rdless
	80	= Total Cov	/er	of size, and woody plants less the		141000
50% of total cover: 40		total cover				
Woody Vine Stratum (Plot size: 15' )				<b>Woody vine</b> – All woody vines g	reater than 3.28	ft in
				height.		
1						
2						
3		-				
4				Hydrophytic		
5				Vegetation		
	^	= Total Cov	/er	Present? Yes	No	
50% of total cover: 0		total cover	_			
		10101 00101	·			
Remarks: (Include photo numbers here or on a separate s	neet.)					

Profile Desc	ription: (Describe to	the depth r	needed to docum	nent the ir	ndicator	or confirm	the abs	ence of indicate	ors.)	
Depth	Matrix		Redo	x Features	3					
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Textu		Remarks	
0-18	2.5YR 4/8	100					CS	Si		
	-		_			-				
							-			
								<del></del>		_
							-			_
	ncentration, D=Deple	etion, RM=Re	duced Matrix, MS	S=Masked	Sand Gra	ins.		on: PL=Pore Lin		
Hydric Soil I	ndicators:						I	Indicators for P	roblematic H	ydric Soils³:
Histosol		-	Dark Surface				-		A10) <b>(MLRA</b> 1	•
	ipedon (A2)	-	Polyvalue Be				148)		Redox (A16)	
Black Hi		-	Thin Dark Su			47, 148)		(MLRA 14		(510)
	n Sulfide (A4) Layers (A5)	-	Loamy Gleye Depleted Ma		-2)		-	Pleamont Fit (MLRA 13	oodplain Soils	(F19)
	ck (A10) <b>(LRR N)</b>	-	Depleted Ma		6)				v Dark Surface	(TF12)
	Below Dark Surface	(A11)	Depleted Dar	•	,		-		in in Remarks	,
	rk Surface (A12)	. , -	 Redox Depre				-			,
Sandy M	ucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Masse	es (F12) <b>(I</b>	_RR N,				
	147, 148)		MLRA 13							
	leyed Matrix (S4)	-	Umbric Surfa					<sup>3</sup> Indicators of h		_
	edox (S5)	-	Piedmont Flo					wetland hydro		
	Matrix (S6)	-	Red Parent N	/laterial (F2	21) <b>(MLR</b>	A 127, 147	7)	unless disturb	ed or problem	natic.
	.ayer (if observed):									
Type:			=				l		.,	4/
	:hes):		-				Hydrid	Soil Present?	Yes	No
Remarks:										

Project/Site: MVP		City/Co	ounty: Franklin		Sampling Date: 07/24/2015		
Applicant/Owner: MVP			•		Sampling Point: W-DD1		
Investigator(s): A Lands, S Kite, L Sext							
Landform (hillslope, terrace, etc.): flood					Slope (%): 3-5%		
Subregion (LRR or MLRA): LRRP					Datum: NAD83		
Soil Map Unit Name: Comus-Maggod							
Are climatic / hydrologic conditions on the					·		
Are Vegetation, Soil, or H		-			present? Yes No		
Are Vegetation, Soil, or H		-		explain any answe			
SUMMARY OF FINDINGS – At	-				,		
		<u> </u>					
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes		Is the Sampled Area				
Wetland Hydrology Present?	Yes V	No	within a Wetland?	Yes	No		
Remarks:							
Cowardin Code: PEM; HGM: R	.iverine; W1:	RPWWN					
Information listed on this form re of wetland hydrology, hydrophyti Supplement delineation methodo	presents the ic vegetation ology.	data collected ir , and hydric soils	n 2015. The wetland s was confirmed usi	d was revisited ng the USACE	d on 11/10/2019. Presence E EMP Regional		
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum of one is r	equired; check a	all that apply)		Surface Soil	Cracks (B6)		
Surface Water (A1)	т	rue Aquatic Plants (E	314)		getated Concave Surface (B8)		
High Water Table (A2)		lydrogen Sulfide Odd		✓ Drainage Pa	atterns (B10)		
Saturation (A3)			es on Living Roots (C3)	Moss Trim L	Lines (B16)		
Water Marks (B1)		Presence of Reduced			Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Bu			
Drift Deposits (B3)		hin Muck Surface (C			isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	C	Other (Explain in Rem	narks)		Stressed Plants (D1)		
Iron Deposits (B5)					Position (D2)		
Inundation Visible on Aerial Imager	y (B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B9)				Microtopographic Relief (D4)			
Aquatic Fauna (B13)				FAC-Neutra	Test (D5)		
Field Observations:		D (1 (1 )					
		Depth (inches): Depth (inches):					
Saturation Present? Yes (includes capillary fringe)	No I	Depth (inches):	Wetland F	lydrology Prese	nt? Yes V No		
Describe Recorded Data (stream gauge	e, monitoring we	ell, aerial photos, prev	vious inspections), if ava	ilable:			
Damada							
Remarks:							

#### VEGETATION (Four Strata) - Use scientific names of plants.

2. Platanus occidentalis

Sapling/Shrub Stratum (Plot size: 15')

3. Scirpus atrovirens Willd

Woody Vine <u>Stratum</u> (Plot size: \_\_\_\_\_\_)

2. Platanus occidentalis

Tree Stratum (Plot size: \_

1. Salix nigra

1. Salix nigra

Herb Stratum (Plot size: \_\_\_ 1. Leersia oryzoides

7. Verbesina alternifolia

8. Agrostis gigantea

2. Juncus articulatus

4. Juncus effusus

5. Carex Iurida 6. Carex vulpinoidea \_\_\_)

50% of total cover: 5 20% of total cover: 2

50% of total cover: \_\_\_5

50% of total cover: 60 20% of total cover: 24

50% of total cover: 0 20% of total cover:

nes of	plants.		Samplir	ng Point:	W-DD1	
bsolute			Dominance Test worksh	eet:		
5	Species?		Number of Dominant Spec		5	
5		OBL	That Are OBL, FACW, or	FAC:	<u> </u>	(A)
		FACW_	Total Number of Dominan Species Across All Strata:		5	(B)
			Percent of Dominant Spec That Are OBL, FACW, or		100	(A/E
			Prevalence Index works	heet:		
10 .	= Total Cov		Total % Cover of:	M	ultiply by:	
	total cover:	•	OBL species	x 1 =		_
2070 01	total covor.		FACW species	x 2 =		_
5	<b>/</b>	OBL	FAC species	x 3 =		
5		FACW	FACU species			_
		I ACW	UPL species	x 5 =		
			Column Totals:	(A)		 (B
						_ `
			Prevalence Index =			_
			Hydrophytic Vegetation			
			1 - Rapid Test for Hyd		egetation	
-			2 - Dominance Test is			
10 -	= Total Cov		3 - Prevalence Index			
	total cover:	•	4 - Morphological Ada	aptations1 (	Provide sur	oportir
2070 0.			data in Remarks o	r on a sepa	arate sheet)	)
70	<b>✓</b>	OBL	Problematic Hydrophy	ytic Vegeta	tion <sup>1</sup> (Expla	ain)
15		OBL				
10		OBL	<sup>1</sup> Indicators of hydric soil a			must
5		FACW	be present, unless disturb			
5		OBL	Definitions of Four Vege	tation Str	ata:	
5			Tree – Woody plants, exc	luding vine	s, 3 in. (7.6	cm) c
5		OBL	more in diameter at breas	t height (D	BH), regard	lless o
5		FAC	height.			
<u> </u>		FACW	Sapling/Shrub – Woody I than 3 in. DBH and greate m) tall.			
			Herb – All herbaceous (no	on-woodv)	plants, rega	ardles
120 .	= Total Cov		of size, and woody plants			
20% of	total cover:	24	Woody vine – All woody wheight.	vines great	er than 3.28	8 ft in
	= Total Cov	^	Hydrophytic Vegetation Present? Yes _	<u>~</u> N	lo	

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: W-DD1

Profile Desc	cription: (Describe t	o the dept	h needed to docun	nent the i	ndicator	or confirn	n the absence	e of indica	ators.)
Depth	Matrix		Redox	x Feature					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>		Remarks
0-6"	10YR 3/4	100					sandy loa	am	organic
6-16"	10YR 4/2	95	7.5YR 4/6	5	С	М	SaCL		
	_							-	
					-			-	
						. ———			
1Typo: C-C	oncentration, D=Depl	otion PM-	Poducod Matrix MS		4 Sand Gr	oine	<sup>2</sup> Location: F	DI – Poro Li	ining, M=Matrix.
Hydric Soil		etion, Rivi=	Reduced Matrix, IVIS	s=iviasked	Sand Gr	ains.			Problematic Hydric Soils <sup>3</sup> :
Histosol			Dork Surface	(87)					(A10) (MLRA 147)
	pipedon (A2)		Dark Surface Polyvalue Be		ce (S8) <b>(I</b>	/II RΔ 147			rie Redox (A16)
	istic (A3)		Tolyvalde Be				, 140) \		147, 148)
	en Sulfide (A4)		Loamy Gleye			, ,	1		Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat		/		<del></del>		136, 147)
	uck (A10) (LRR N)		Redox Dark S		<del>-</del> 6)		、		ow Dark Surface (TF12)
Deplete	d Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		(	Other (Exp	olain in Remarks)
	ark Surface (A12)		Redox Depre						
	Mucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangane		es (F12) (	LRR N,			
	A 147, 148)		MLRA 130	•			3.		
	Gleyed Matrix (S4)		Umbric Surfa						hydrophytic vegetation and
	Redox (S5)		Piedmont Flo						rology must be present,
	Matrix (S6)  Layer (if observed):		Red Parent N	riateriai (F	21) (WLR	A 127, 14	<i>(</i> ) ur	niess aistu	rbed or problematic.
	Layer (ii observed).								
Type:	-I \						Unadala Oal		9 V V
	ches):						Hydric Soi	II Present	? Yes <u>/</u> No
Remarks:									

# **Wetland Photograph Page**

#### Wetland ID W-DD1



Photograph Direction NE

Date: 07/24/2015

Comments: 2015 wetland delineation.



Photograph Direction NE

Date: 11/10/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP			City/0	County: Franklin		Sampling Date: 07/24/2015			
Applicant/Owner: MVP			<u> </u>	,		Sampling Point: W-DD1-UPL			
Investigator(s): A Lands, S Kit	e, L Sexton		Sect	ion. Township, Range: N		_			
Landform (hillslope, terrace, etc.):						Slope (%): 3-5%			
Subregion (LRR or MLRA): LRR						Datum: NAD83			
Soil Map Unit Name: Comus-M									
Are climatic / hydrologic conditions						<u></u>			
						present? Yes No			
Are Vegetation, Soil									
Are Vegetation, Soil					explain any answe				
SUMMARY OF FINDINGS	– Attach site n	nap show	ving sar	npling point locatio	ons, transects	s, important features, etc.			
Hydrophytic Vegetation Present?	Yes	No		Is the Sampled Area					
Hydric Soil Present?	Yes	_ No		within a Wetland?	Yes	No			
Wetland Hydrology Present?	Yes	_ No	<u></u>						
HYDROLOGY									
Wetland Hydrology Indicators:						ators (minimum of two required)			
Primary Indicators (minimum of o	-			(5.4.1)	Surface Soil				
Surface Water (A1)		True Aqua				egetated Concave Surface (B8)			
High Water Table (A2) Saturation (A3)		Hydrogen			Drainage Pa				
Water Marks (B1)		Presence				Water Table (C2)			
Sediment Deposits (B2)				on in Tilled Soils (C6)	Crayfish Burrows (C8)				
Drift Deposits (B3)	<u> </u>	Thin Muck			Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)		Other (Exp	olain in Re	marks)	Stunted or S	Stressed Plants (D1)			
Iron Deposits (B5)					Geomorphic				
Inundation Visible on Aerial	magery (B7)				Shallow Aqu				
Water-Stained Leaves (B9)						aphic Relief (D4)			
Aquatic Fauna (B13)  Field Observations:					FAC-Neutra	i Test (D5)			
	′es No <b>✓</b>	Depth (inc	ches):						
	′es No								
	′es No				lydrology Prese	nt? Yes No			
(includes capillary fringe)  Describe Recorded Data (stream					vilabla:				
Describe Recorded Data (Stream	gauge, monitoring	weii, aeriai į	onotos, pr	evious irispections), ii ava	mable.				
Remarks:	-								

#### **VEGETATION** (Four Strata) – Use scientific names of plants.

Sampling Point: W-DD1-UPL

201		Dominant li		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30')	% Cover S	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:0 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species That Are OBL_FACW_or FAC:  (A/B)
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	0 =			Total % Cover of: Multiply by:
500/ // / 0		Total Cove		OBL species x 1 =
4.51	20% of to	ital cover:_	0	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 )				
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				
				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 0	20% of to	tal cover:_	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')				Problematic Hydrophytic Vegetation¹ (Explain)
1. Andropogon virginicus	40	F	ACU	Problematic Hydrophytic Vegetation (Explain)
2. Solanum carolinense	40	<b>✓</b> F	ACU	4
3. Trifolium arvense	10	·	JPL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Vernonia noveboracensis	5		ACW	
5. Bromus arvensis	5			Definitions of Four Vegetation Strata:
5 Diomas arvensis	J	F	-ACJ	
~ <del></del>		F	ACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6			-ACU	more in diameter at breast height (DBH), regardless of
6			ACU	
6			-ACU	more in diameter at breast height (DBH), regardless of height.
6			-ACU	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
6			-ACU	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less
6			-ACU	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
6				more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
6	100 = 1			more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6	100 = 1	Total Cove		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6		Total Cove		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6	100 = 7 20% of to	Total Cove		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	100 = 7 20% of to	Total Cove		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6		Total Cove		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6		Total Cove		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
6	100 = 7 20% of to	Total Cove	20	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6	100 = 7 20% of to	Total Cover:_	20	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
6	100 = 7 20% of to	Total Cove	20	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6		Total Cover:_	20	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6		Total Cover:_	20	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6		Total Cover:_	20	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6		Total Cover:_	20	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6		Total Cover:_	20	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6		Total Cover:_	20	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6		Total Cover:_	20	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6		Total Cover:_	20	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation

SOIL Sampling Point: W-DD1-UPL

Profile Desc	ription: (Describe t	o the depth	n needed to docum	nent the i	ndicator o	or confirm	the absen	ce of indica	tors.)	
Depth	Matrix		Redo	x Features	3					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarl	
0-7"	10YR 3/6	100					sandy lo	<u>a</u>	orga	nic
7-16"	10YR 4/4	100					sandy lo	a		
<del></del>										
								_		
					-		-			
	oncentration, D=Depl	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gra	ins.			ning, M=Mat	
Hydric Soil							Inc			Hydric Soils <sup>3</sup> :
Histosol			Dark Surface				_		(A10) <b>(MLR</b>	
	pipedon (A2)		Polyvalue Be				148)		rie Redox (A	16)
	stic (A3)		Thin Dark Su	, ,	•	47, 148)			147, 148)	sile (Ε40)
	en Sulfide (A4) d Layers (A5)		Loamy Gleye Depleted Ma		<b>-∠</b> )				Floodplain Sc 1 <b>36, 147)</b>	ons (F19)
	ick (A10) <b>(LRR N)</b>		Redox Dark \$		6)				ow Dark Surf	ace (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar						lain in Rema	
	ark Surface (A12)	,	Redox Depre					` .		,
Sandy N	lucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangan	ese Masse	es (F12) <b>(I</b>	RR N,				
	A 147, 148)		MLRA 13	•			2			
	Gleyed Matrix (S4)		Umbric Surfa							vegetation and
	Redox (S5)		Piedmont Flo						rology must b	
	Matrix (S6)  Layer (if observed):		Red Parent N	nateriai (F.	21) <b>(MLR</b> /	4 127, 147	<u>')</u>	uniess distui	rbed or probl	ematic.
Type:								- '' D		<b>/</b>
	ches):		<u>—</u>				Hydric S	oil Present?	Yes	No
Remarks:										
i										
1										
1										
1										

Project/Site: MVP		City/C	<sub>ounty:</sub> Franklin		Sampling Date: 04/07/2015		
Applicant/Owner: MVP					Sampling Point: W-A12 PFC		
Investigator(s): S.Yarbrough,							
Landform (hillslope, terrace, et					Slope (%): 0%		
Subregion (LRR or MLRA): L	RRP	1 at: 37.032272			Datum: NAD 83		
- · · · · · · · · · · · · · · · · · · ·			_		ation: PEM1/SS1A & PFO1A		
Are climatic / hydrologic condit					·		
•		· · · · · · · · · · · · · · · · · · ·			resent? Yes No		
Are Vegetation, Soil							
-	-			explain any answei	, important features, etc.		
				mo, transcoto	, important reatures, etc.		
Hydrophytic Vegetation Prese			Is the Sampled Area				
Hydric Soil Present?		No	within a Wetland?	Yes	No		
Wetland Hydrology Present?	Yes	No					
Remarks: Cowardin Code: PFO; H	IGM: RIVERINE;	WT: RPWWD					
of wetland hydrology, hy Supplement delineation	s form represents drophytic vegeta methodology.	s the data collected in ation, and hydric soils	n 2015. The wetland s was confirmed usi	d was revisited ng the USACE	on 11/10/2019. Presence EMP Regional		
HYDROLOGY							
Wetland Hydrology Indicate					tors (minimum of two required)		
Primary Indicators (minimum	-			Surface Soil			
Surface Water (A1)		True Aquatic Plants (			etated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Odd		<u>✓</u> Drainage Pat	` '		
Saturation (A3)		<ul><li>Oxidized Rhizosphere</li><li>Presence of Reduced</li></ul>	-	Moss Trim Li			
<ul><li>Water Marks (B1)</li><li>Sediment Deposits (B2)</li></ul>		Recent Iron Reductio			Nater Table (C2)		
Drift Deposits (B3)	•	Thin Muck Surface (C		Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Other (Explain in Ren			ressed Plants (D1)		
Iron Deposits (B5)	•		,	<b>C</b> Geomorphic	` ,		
Inundation Visible on Aei	rial Imagery (B7)			Shallow Aqui			
Water-Stained Leaves (E	39)			✓ Microtopogra	phic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)		
Field Observations:							
Surface Water Present?		Depth (inches):	1				
Water Table Present?	Yes No	Depth (inches):	0				
Saturation Present?	Yes No	Depth (inches):	0 Wetland H	lydrology Presen	t? Yes <u>/</u> No		
(includes capillary fringe)  Describe Recorded Data (stre	eam gauge, monitori	ng well, aerial photos, pre	 vious inspections), if ava	ilable:			
(***	33.,	3 - ,	.,,				
Remarks:							

001	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Dominant Species
1. Acer rubrum	45		FAC	That Are OBL, FACW, or FAC:5 (A)
2.				
3	-	-		Total Number of Dominant Species Across All Strata:5 (B)
4				Species Across Air Strata.
		-		Percent of Dominant Species
5		-	· ——	That Are OBL, FACW, or FAC:100% (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		
50% of total cover: <u>22.</u>	20% of	total cover	<u>9</u>	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' )				FACW species x 2 =
1. Alnus serrulata	30		OBL	FAC species x 3 =
2. Lindera benzoin	10		FAC	FACU species x 4 =
3				UPL species x 5 =
4.				Column Totals: (A) (B)
		-		
5		-		Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov	er er	4 - Morphological Adaptations¹ (Provide supporting
50% of total cover: 20	20% of	total cover	<u>. 8</u>	
Herb Stratum (Plot size: 5' )				data in Remarks or on a separate sheet)
1. Impatiens pallida	45		FACW_	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Poa sp.	30		ND	
3. Juncus effusus	15	~	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Carex Iurida	10		FACW	be present, unless disturbed or problematic.
· · ·		-	I ACW	Definitions of Four Vegetation Strata:
5		-		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		-		more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	100	= Total Cov	er er	of size, and woody plants less than 3.28 ft tall.
50% of total cover:50	20% of	total cover	20	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in height.
1.				neight.
2	-	-		
3				
4				Hydrophytic
5				Vegetation
•		= Total Cov	_	Present? Yes No
50% of total cover: 0	20% of	total cover	:0	
Remarks: (Include photo numbers here or on a separate s	heet.)			
ND - Species not determined. Entries labeled N	D were n	ot include	ed in don	ninance test.

Sampling Point: W-A12 PFO

SOIL

Depth	ription: (Describe Matrix	-	Redo	x Features				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u> Typ		<u>Texture</u>	Remarks	
0-18"	10YR 5/2	85	7.5YR 5/8	<u>15</u> C	M/PL	SiCL		
18-24"	10YR 4/1	97	7.5YR 5/8	3 <u>C</u>	M/PL	SiCL		
				· <u></u>				
				·				
T C. C.		lation DM	Deduced Metric M	C Maalaal Caa		21 anations DI	Dave Linian M. Metric	
	oncentration, D=Dep Indicators:	ietion, Rivi	=Reduced Matrix, M	S=Masked Sand	Grains.		Pore Lining, M=Matrix.  ors for Problematic Hy	
Histosol			Dark Surface	(\$7)			n Muck (A10) <b>(MLRA 1</b>	
	pipedon (A2)			elow Surface (S	3) <b>(MLRA 147</b> .		st Prairie Redox (A16)	
Black Hi				urface (S9) <b>(ML</b> I			MLRA 147, 148)	
	n Sulfide (A4)			ed Matrix (F2)	, -,	•	lmont Floodplain Soils	(F19)
	d Layers (A5)		Depleted Ma			(N	MLRA 136, 147)	
	ick (A10) (LRR N)		Redox Dark	, ,			/ Shallow Dark Surface	
	d Below Dark Surface	e (A11)		rk Surface (F7)		Othe	er (Explain in Remarks	)
	ark Surface (A12)	DD N	Redox Depre		0) (I DD N			
	lucky Mineral (S1) <b>(L</b> <b>\ 147, 148)</b>	LKK N,	iron-iviangan MLRA 13	ese Masses (F	2) (LRR N,			
	Gleyed Matrix (S4)			ace (F13) <b>(MLR</b> .	۵ 136  122)	<sup>3</sup> Indica	tors of hydrophytic veg	netation and
	tedox (S5)			oodplain Soils (F			nd hydrology must be	
	Matrix (S6)			Material (F21) (			s disturbed or problem	
	_ayer (if observed):			· · · · · · · · · · · · · · · · · · ·	•		·	
Type:								
Depth (in	ches):					Hydric Soil Pr	resent? Yes 🔽	No
Remarks:								

# **Wetland Photograph Page**

#### Wetland ID W-A12 PFO



Photograph Direction North

Date: 04/07/2015

Comments: 2015 wetland delineation.



Photograph Direction NE

Date: 11/10/19

Project/Site: MVP			(	City/Co	unty: Fran	klin		Sampling Da	ate: 11/18/2019
Applicant/Owner: MVP				Oity/ Oo	,unity:		State: VA	Sampling	Point: W-A12 -PEM
Investigator(s): DH, RS				Section	n Townshin	Pange: N	/A	camping	T OITIL
Landform (hillslope, terrace, et	· Valley b	ottom		oection	of (concave	convox no	no). Concave		Slone (%): 0%
Subregion (LRR or MLRA): L	RRP		L00 37 036051	ai reile	i (concave, i		787451		NAD 83
						_			
Soil Map Unit Name: Comus									/33 IA & FFO IA
Are climatic / hydrologic condit	_		· · · · · · · · · · · · · · · · · · ·						
Are Vegetation, Soil	, or Hydr	ology	significantly of	disturb	ed? A	re "Norma	I Circumstances" p	resent? Yes	s No
Are Vegetation, Soil	, or Hydr	ology	naturally pro	blemat	ic? (I	If needed,	explain any answe	rs in Remark	s.)
SUMMARY OF FINDIN	GS – Attac	h site r	map showing	samı	pling poir	nt location	ons, transects	, importar	nt features, etc.
Hydrophytic Vegetation Pres	ent? V	es 🗸	No						
Hydric Soil Present?		es 🗸	No		Is the Samp		V V	No	
Wetland Hydrology Present?		es 🗸	No		within a We	etiano?	res	NO	<del></del>
Remarks: Cowardin Code: PEM H	GM: RIVERI	NF W	/T· RPW/WD						
Additional areas of PEM w W-A12-PFO wetland was p delineated as W-A12-PEM clearing and other habitat a	etland abutti previously co did not mee alterations in	ng wetla nfirmed t all 3 w the vici	and W-A12-PFO by USACE Nort etland criteria. T nity.	were folk Di he ob	observed of istrict during servation of	during 201 g 2015 fie of wetland	19 Delineation C ld reviews, at wl criteria in 2019	onfirmation nich time the s likely due	surveys. e area now to tree/shrub
HYDROLOGY									
Wetland Hydrology Indicate	ors:						Secondary Indica	tors (minimu	m of two required)
Primary Indicators (minimum	of one is requ	ired; che					Surface Soil	, ,	
Surface Water (A1)			_ True Aquatic Pla				Sparsely Ve		ave Surface (B8)
High Water Table (A2)			<ul><li>Hydrogen Sulfide Odor (C1)</li><li>Oxidized Rhizospheres on Living Roots (C3)</li></ul>				✓ Drainage Pa		
Saturation (A3)			='		-	Roots (C3)	Moss Trim L	` ,	(00)
Water Marks (B1) ✓ Sediment Deposits (B2)			Presence of Rec Recent Iron Rec			lc (C6)	Dry-Season Crayfish Bur		(C2)
Drift Deposits (B3)			Thin Muck Surfa			13 (00)	,	` ,	al Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in	,	,		Stunted or S		<b>0</b> , , ,
Iron Deposits (B5)		_			-,		Geomorphic		
Inundation Visible on Ae	rial Imagery (E	7)					Shallow Aqu		
Water-Stained Leaves (E	39)						Microtopogra		04)
Aquatic Fauna (B13)							FAC-Neutral	Test (D5)	
Field Observations:									
Surface Water Present?			_ Depth (inches):						
Water Table Present?			_ Depth (inches):						
Saturation Present? (includes capillary fringe)	Yes	No	_ Depth (inches):			Wetland I	Hydrology Preser	t? Yes	No
Describe Recorded Data (stre	eam gauge, m	onitoring	well, aerial photos	s, prev	ious inspecti	ions), if ava	ailable:		
Remarks:									
remarks.									

#### **VEGETATION** (Four Strata) – Use scientific names of plants.

0.01	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				
5				Percent of Dominant Species That Are OBL FACW or FAC: 100% (A/B)
6				That Are OBL, FACW, or FAC: 100% (A/B)
				Prevalence Index worksheet:
7	0	Tatal Car		Total % Cover of: Multiply by:
50% of total cover: 0		= Total Cov		OBL species x 1 =
	20% 01	total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15' )  1. Alnus serrulata	5	~	ODL	FAC species x 3 =
· · ·			OBL	FACU species x 4 =
2				·
3				UPL species x 5 =
4	-			Column Totals: (A) (B)
5				Prevalence Index = B/A =
6	-			
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				✓ 2 - Dominance Test is >50%
v	5	= Total Cov	or.	3 - Prevalence Index is ≤3.0¹
50% of total cover: 2.5				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5' )	2070 01	total cover		data in Remarks or on a separate sheet)
1. Eupatorium perfoliatum	30	~	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Schizachyrium scoparium	10			
	15		FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Cyperus esculentus			FACW_	be present, unless disturbed or problematic.
4. Carex lurida	40		OBL	Definitions of Four Vegetation Strata:
5				
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11				
· · · · · · · · · · · · · · · · · · ·	95	T-1-1-0		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: _ 47.5		= Total Cov		or size, and woody plants less than 3.26 it tall.
4.51	<u> </u>	total cover		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15')				height.
1	-			
2				
3				
4	-			Hydrophytic
5	-			Vegetation
	0	= Total Cov	er	Present? Yes V No No
50% of total cover:0		total cover	_	
Remarks: (Include photo numbers here or on a separate s	heet.)			
(	,			

Sampling Point: W-A12 -PEM

SOIL

Profile Desc	cription: (Describe t	o the dept	h needed to docur	nent the i	indicator	or confirm	the absence	of indicators.)
Depth	Matrix	<u> </u>	Redo	x Feature	<u>s_</u>			
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-10	7.5 YR 5/4	85	2.5YR 4/6	15	С	M/PL	SL	With sand
10-20	7.5YR 5/4	70	2.5YR 4/6	30		M/PL	SL	With sand
10-20	7.511( 3/4		2.31 \ 4/0		С	IVI/ F L		VVIIII Sand
						<del></del>		
						<del></del>		
<sup>1</sup> Type: C=C	oncentration, D=Depl	etion RM=	Reduced Matrix MS	S=Masked	d Sand Gr	ains	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil		Cuon, Itivi–	reduced Matrix, Mi	J-Masket	J Garia Gi	airio.		ators for Problematic Hydric Soils <sup>3</sup> :
-			Dork Surface	(07)				-
Histosol			Dark Surface Polyvalue Be		00 (80) /	MI DA 447		cm Muck (A10) (MLRA 147)
	pipedon (A2)						140) (	oast Prairie Redox (A16)
	istic (A3)		Thin Dark Su			147, 148)	n	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(FZ)		P	iedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma		-0)			(MLRA 136, 147)
	uck (A10) (LRR N)	(011)	Redox Dark					ery Shallow Dark Surface (TF12) hther (Explain in Remarks)
	d Below Dark Surface ark Surface (A12)	(A11)	Depleted Date Redox Depre				<u>•</u> 0	uner (Explain in Remarks)
		DD N	Iron-Mangan			I DD N		
	Mucky Mineral (S1) <b>(L</b> <b>A 147, 148)</b>	KK N,	MLRA 13		es (F12) (	LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa	•	/MI DA 11	26 122\	3Ind	icators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					tland hydrology must be present,
	Matrix (S6)		Red Parent N					less disturbed or problematic.
	Layer (if observed):		Neu Faieiil i	viateriai (i	ZI) (IVILIN	A 121, 141	) un	less disturbed of problematic.
	Layer (ii observeu).							
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:								
Soil disturb	cance from recent	t constru	ction, concentra	itions ar	e very ti	hick in pla	aces. Sand	has been incorporated
throughout								

# **Wetland Photograph Page**

Wetland ID W-A12 -PENCowardin Code PEM Date 11/18/2019



Photograph Number 1
Photograph Direction NE

Comments:



Photograph Number 2
Photograph Direction ESE

Comments:

Project/Site: MVP			City/	County: Franklin		_ Sampling Date: 04/07/2015	
Applicant/Owner: MVP						Sampling Point: W-A12-UP	
	leule	Section, Township, Range: N/A					
Landform (hillslope, terrace, etc.): Hillslope						Slope (%): 0-3%	
Subregion (LRR or MLRA): LRRP						Datum: NAD83	
Soil Map Unit Name: Clifford fine sand							
Are climatic / hydrologic conditions on the s							
Are Vegetation, Soil, or Hyd	• •		•		•	present? Yes No	
Are Vegetation, Soil, or Hyd		-	-		explain any answ		
SUMMARY OF FINDINGS – Atta							
			, willig sai			o, important reatares, etc.	
	Yes		<u>/</u>	Is the Sampled Area			
	Yes		<u> </u>	within a Wetland?	Yes	No	
Wetland Hydrology Present?  Remarks:	Yes	No	<del>-</del>				
Upland							
HYDROLOGY							
Wetland Hydrology Indicators:					Secondary Indic	cators (minimum of two required)	
Primary Indicators (minimum of one is req	uired; check	k all that a	apply)		Surface Soi	l Cracks (B6)	
Surface Water (A1)		True Aqu	uatic Plants	(B14)	Sparsely Ve	egetated Concave Surface (B8)	
High Water Table (A2)			en Sulfide O		_	atterns (B10)	
Saturation (A3)				res on Living Roots (C3)	Dry-Season Water Table (C2)		
Water Marks (B1)	·		e of Reduce	, ,			
Sediment Deposits (B2)				on in Tilled Soils (C6)	Crayfish Bu		
Drift Deposits (B3)			ck Surface (			/isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Otner (E	xplain in Re	emarks)		Stressed Plants (D1)	
Iron Deposits (B5) Inundation Visible on Aerial Imagery (	(D7)					c Position (D2)	
Water-Stained Leaves (B9)	, D1)				Shallow Aq	raphic Relief (D4)	
Aquatic Fauna (B13)					FAC-Neutra	• • •	
Field Observations:							
	No 🗸	Depth (i	inches):				
Water Table Present? Yes	No 🔽	Depth (i	inches):				
	No 🗸				Hydrology Prese	nt? Yes No	
(includes capillary fringe)  Describe Recorded Data (stream gauge, r					ailahla:		
Beschibe Recorded Bata (stream gauge, i	nonitoning w	von, acria	ii priotos, pr	evious inspections), ii av	aliable.		
Remarks:							
No indicators of wetland hydrology	/						

Sampling	Point: W-A12-UP1
----------	------------------

<u> </u>		•		
T 0: (D) (1: 30'		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:30')	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				
				Total Number of Dominant Species Across All Strata: 2 (B)
3				Species Across All Strata: 2 (B)
4		· <del></del>		Percent of Dominant Species
5		. <u> </u>		That Are OBL, FACW, or FAC:0% (A/B)
6				
3.				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
		= Total Cov	er _	
50% of total cover:0	20% of	total cover	: 0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Rosa multiflora	5	<b>/</b>	FACU	FAC species x 3 =
''-			1 700	
2				FACU species x 4 =
3				UPL species x 5 =
				Column Totals: (A) (B)
4			<del></del>	(-)
5				Prevalence Index = B/A =
6				
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8		· <del></del>		2 - Dominance Test is >50%
9				<u> </u>
	5	= Total Cov	/er	3 - Prevalence Index is ≤3.0¹
50% of total cover: 2.5		total cover		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
E!	20 /0 01	total cover		data in Remarks or on a separate sheet)
Tierb Stratum (Flot Size)				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Poa pratensis	60		F <u>ACU</u>	1 Toblematic Hydrophytic Vegetation (Explain)
2. Trifolium sp	15		ND	
3. Bromus sp.	15			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
			ND	be present, unless disturbed or problematic.
4. Andropogon virginicus	10		F <u>ACU</u>	Definitions of Four Vegetation Strata:
5				<b>3</b>
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		· -		more in diameter at breast height (DBH), regardless of
7				height.
8				One the wild have been been a such affine a few and a second seco
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
				m) tall.
10	-	· <del></del>		m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	100	= Total Cov	/er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50		total cover		, , , , , , , , , , , , , , , , , , , ,
451	2070 01	total oover		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
•				
3				
4				Hydrophytic
5.				Vegetation
	0	= Total Cov	/Or	Present? Yes No
50% of total cover: 0			_	
		total cover	:	
Remarks: (Include photo numbers here or on a separate s	heet.)			
ND - Not Determined. Vegetation not identified	o specie	s level wa	as not inc	cluded in dominance test
14D 140t Determined. Vegetation not identified	o specie	3 ICVCI W	33 1101 1110	sidded in dominance test.

SOIL Sampling Point: W-A12-UP1

Profile Desc	ription: (Describe t	o the depth	needed to document t	the indicator o	r confirm	the absen	ce of indicato	ors.)
Depth	Matrix		Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist) %		Loc <sup>2</sup>	Texture		Remarks
0-14"	5YR 4/6	100				SL		
						-		
								_
	-							
						-		
	-							
		etion, RM=Re	educed Matrix, MS=Ma	sked Sand Gra	ins.		PL=Pore Lini	
Hydric Soil	Indicators:					Inc	licators for Pr	oblematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface (S7)				2 cm Muck (A	410) <b>(MLRA 147)</b>
Histic Ep	oipedon (A2)		Polyvalue Below S	urface (S8) (MI	LRA 147,	148)	Coast Prairie	Redox (A16)
Black Hi	stic (A3)		Thin Dark Surface	(S9) (MLRA 14	17, 148)		(MLRA 14	7, 148)
	en Sulfide (A4)		Loamy Gleyed Ma	trix (F2)				oodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F				(MLRA 13	
	ıck (A10) (LRR N)		Redox Dark Surface					Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dark Sur				Other (Explai	in in Remarks)
	ark Surface (A12)		Redox Depression					
	Mucky Mineral (S1) (L	RR N,	Iron-Manganese M	lasses (F12) <b>(L</b>	RR N,			
	A 147, 148)		MLRA 136)	40) (NI DA 400	100\	3	La Partaga de la	odnosti de constaten en d
	Gleyed Matrix (S4)		Umbric Surface (F					ydrophytic vegetation and
	Redox (S5)		Piedmont Floodpla				-	logy must be present,
	Matrix (S6)  Layer (if observed):		Red Parent Materi	ai (FZI) (WLKA	127, 147	)	uniess disturbe	ed or problematic.
	Layer (II observed).							
Type:			_					
Depth (in	ches):		_			Hydric S	oil Present?	Yes No
Remarks:								
No hydric i	ndicators							

Project/Site: MVP		City/C	ounty: Franklin		Sampling Date: 05/27/2016		
Applicant/Owner: MVP				State: VA	Sampling Point: W-GH16		
Investigator(s): K. Larsen, D.	McCullough, L. S	Sexton Section	on, Township, Range: N/		_ ,		
Landform (hillslope, terrace, etc.)		<del></del>			Slope (%): 0		
Subregion (LRR or MLRA): LRI					Datum: NAD 83		
Soil Map Unit Name: 7D - Cliffo							
Are climatic / hydrologic condition							
· · · · · ·		•					
Are Vegetation, Soil							
Are Vegetation, Soil				explain any answe	,		
SUMMARY OF FINDINGS	S – Attach site r	nap showing sam	pling point location	ons, transects	, important features, etc.		
Hydrophytic Vegetation Present	? Yes <u></u>	No	Is the Sampled Area				
Hydric Soil Present?	Yes	No	within a Wetland?	Yes 🗸	No		
Wetland Hydrology Present?	Yes	No					
Remarks: Cowardin Cod	le: PFO	HGM: Riverine	Water Type:	RPWWD			
Upland plot is W-GH16-Up	)						
HYDROLOGY							
Wetland Hydrology Indicators	<u> </u>			Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum of		ck all that apply)		Surface Soil			
Surface Water (A1)	•	True Aquatic Plants (	B14)		getated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Par			
Saturation (A3)			es on Living Roots (C3)	Moss Trim Li			
Water Marks (B1)		Presence of Reduced	-		Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reductio	n in Tilled Soils (C6)	Crayfish Burrows (C8)			
Drift Deposits (B3)		Thin Muck Surface (C	C7)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Other (Explain in Ren	narks)	Stunted or St	tressed Plants (D1)		
Iron Deposits (B5)				Geomorphic	Position (D2)		
Inundation Visible on Aeria	Imagery (B7)			Shallow Aqui	tard (D3)		
Water-Stained Leaves (B9)					phic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)		
Field Observations:	Vaa 🗸 Na	Donth (in all an)	1				
Surface Water Present?	Yes V No No No No No No	_ Depth (inches):	10				
Saturation Present? (includes capillary fringe)	Yes No	_ Depth (inches):	Wetland H	lydrology Presen	t? Yes V No		
Describe Recorded Data (stream	m gauge, monitoring	well, aerial photos, pre	vious inspections), if ava	ilable:			
Remarks:							
Riverine bottomland wetla	nd adjacent to S	-GH44.					
	•						

Sampling Point VV-OI I I O	Sampling	Point:	W-	GH16
----------------------------	----------	--------	----	------

Troo Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:
Tiee Stratum (Fiot Size)		Species?		Number of Dominant Species _
1. Fraxinus pennsylvanica	55		<u>FACW</u>	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	30		FAC	Total Number of Dominant
3. Liriodendron tulipifera	15		<u>FACU</u>	Species Across All Strata: 5 (B)
4				
5				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
				That Are OBL, FACW, or FAC:100 (A/B)
6		-		Prevalence Index worksheet:
7	100		· ——	Total % Cover of: Multiply by:
500/ - ( ) -		= Total Cov		OBL species x 1 =
50% of total cover: 50 Sapling/Shrub Stratum (Plot size: 15'	20% of	total cover	:	FACW species x 2 =
Capinig/Oritab Stratum (1 lot 3/26.	4-	,		•
1. Lindera benzoin	15		FAC	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				December on Indian D/A
6				Prevalence Index = B/A =
		-		Hydrophytic Vegetation Indicators:
7		-		1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7.5		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 7.5	20% of	total cover	:3	data in Remarks or on a separate sheet)
( lot size:)	0.5	,		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Symplocarpus foetidus	85		OBL	1 Toblematio Trydrophytio Vegetation (Explain)
2. Microstegium viminium	10		F <u>AC</u>	The directors of burdels and supplies of burdels are
3. Lindera benzoin	5		FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Definitions of Four Vogetation Strata.
6		·		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
				Holghi.
8			· ——	Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tan.
11	400		·	Herb – All herbaceous (non-woody) plants, regardless
		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>50</u>	20% of	total cover	: 20	<b>Woody vine</b> – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 15')	_	,		height.
1. Smilax rotundifolia	5		FAC	
2				
3				
4				Hadron bod's
5.				Hydrophytic Vegetation
	5	= Total Cov	/er	Present? Yes V No No
50% of total cover: 2.5		total cover		
Remarks: (Include photo numbers here or on a separate s		10101 00101		
Remarks. (include prioto numbers here of on a separate s	neet.)			

Sampling Point: W-GH16

SOIL

	ription: (Describe	to the dept				or confirm	the absence	of indicate	ors.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Features %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-3	10YR 4/2	97	10YR 4/3	3	С	M/PL	SL			
3-12	10YR 4/1	95	10YR 4/4	5	С	M	SL			
12-18	10YR 4/1	98	10YR 4/4	2	С	M	SL		Mucky	/
12 10	10111 4/1		10111 474						ividolty	<u>'</u>
						- <del></del>				
						<del>-</del>				
1							2			
	oncentration, D=Depl	letion, RM=	Reduced Matrix, MS	S=Masked	Sand G	rains.	<sup>2</sup> Location: PL			
Hydric Soil I			5 10 (	(07)					roblematic Hy	
Histosol	(A1) pipedon (A2)		Dark Surface Polyvalue Be		o (CO) 4	MI D A 447			A10) <b>(MLRA 1</b> Redox (A16)	
Histic Ep Black Hi	• • •		Polyvalue Be		. , .		1 <b>40)</b> C	MLRA 14)		
	n Sulfide (A4)		Loamy Gleye			, 1 <del>70</del>	Pi		oodplain Soils	(F19)
	Layers (A5)		Depleted Mat		,		· ·	(MLRA 13		, ,
	ick (A10) (LRR N)		Redox Dark S	,	,				Dark Surface	
	Below Dark Surface	e (A11)	Depleted Dar				0	ther (Expla	in in Remarks	)
	ark Surface (A12)	DD 11	Redox Depre			(I DD N				
	lucky Mineral (S1) <b>(L</b> <b>\ 147, 148)</b>	.RR N,	Iron-Mangan		s (F12)	(LRR N,				
	sleyed Matrix (S4)		Umbric Surfa	•	MIRA 1	36 122)	<sup>3</sup> Indi	cators of h	ydrophytic veg	retation and
	edox (S5)		Piedmont Flo						logy must be i	
-	Matrix (S6)		Red Parent N						ed or problem	
Restrictive I	ayer (if observed):									
Type:										
Depth (inc	ches):						Hydric Soil	Present?	Yes 🗸	No
Remarks:										



Photograph Direction East

Comments:			

Project/Site: MVP		City/C	<sub>ounty:</sub> Franklin		Sampling Date: 05/27/2016	
Applicant/Owner: MVP					Sampling Point: W-GH16-up	
Investigator(s): K. Larsen, D. McCull	ough, L. S					
Landform (hillslope, terrace, etc.): Slope			· · · · · · · · · · · · · · · · · · ·		Slope (%): 2	
Subregion (LRR or MLRA): LRR P					Datum: NAD 83	
Soil Map Unit Name: 7D - Clifford fine sa						
Are climatic / hydrologic conditions on the						
Are Vegetation, Soil, or Hy						
Are Vegetation, Soil, or Hy						
SUMMARY OF FINDINGS – Atta						
					, ,	
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes		Is the Sampled Area			
Wetland Hydrology Present?	Yes		within a Wetland?	Yes	No	
Remarks: Cowardin Code: UPL		ı	Water Type:			
Upland plot for W-GH16	AND	110111.	water type.			
Opiana plot for W-arrio						
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)	
Primary Indicators (minimum of one is re	auired: check	c all that apply)		Surface Soil		
Surface Water (A1)	-	True Aquatic Plants (			getated Concave Surface (B8)	
High Water Table (A2)		Hydrogen Sulfide Odd		Drainage Pat		
Saturation (A3)			es on Living Roots (C3)	Moss Trim Li		
Water Marks (B1)		Presence of Reduced	=		Water Table (C2)	
Sediment Deposits (B2)	· · · · · · · · · · · · · · · · · · ·	Recent Iron Reductio	, ,	Crayfish Burr		
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Other (Explain in Ren		Stunted or Stressed Plants (D1)		
Iron Deposits (B5)				Geomorphic	Position (D2)	
Inundation Visible on Aerial Imagery	(B7)			Shallow Aqui	itard (D3)	
Water-Stained Leaves (B9)				Microtopogra	phic Relief (D4)	
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)	
Field Observations:						
		Depth (inches):				
		Depth (inches):				
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches):	Wetland H	lydrology Presen	t? Yes No	
Describe Recorded Data (stream gauge,	monitoring w	vell, aerial photos, pre	vious inspections), if ava	ilable:		
Remarks:						
1						

Sampling	Point: W-GH16-up	
Sambilliu	FUILL TO GE	

Troo Stratum (Plot size: 30'	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tiee Stratum (Fiot Size)		Species?		Number of Dominant Species
1. Quercus montana	25		<u>UPL</u>	That Are OBL, FACW, or FAC: (A)
2. Nyssa sylvatica	20		FAC	Total Number of Deminent
3. Acer rubrum	15		FAC	Total Number of Dominant Species Across All Strata: 8 (B)
4. Liriodendron tulipifera	20	<u> </u>	FACU	(2)
5. Fagus grandifolia	10		FACU	Percent of Dominant Species That Are ORL FACW or FAC: 25 (A/R)
6. Quercus rubra	10			That Are OBL, FACW, or FAC: 25 (A/B)
6. Querous rubra			FACU_	Prevalence Index worksheet:
7	400			Total % Cover of: Multiply by:
		= Total Cov		
50% of total cover:50	20% of	total cover:	20	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' )				FACW species x 2 =
1. Fagus grandifolia	15		<u>FACU</u>	FAC species x 3 =
2. Carpinus caroliniana	10	<b>✓</b>	FAC	FACU species x 4 =
3. Nyssa sylvatica	5		FAC	UPL species x 5 =
			1710	Column Totals: (A) (B)
4				( , ( , ( , (
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				
-	30	= Total Cov		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:15				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	2070 01	total oover.		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 1. Fagus grandifolia	5	~	FACIL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	5		FACU_	
2. Quercus rubra			FACU_	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Quercus montana	5		<u>UPL</u>	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				John Mondo of Four Pogotation Official
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	15,	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 7.5	20% of	total cover:	3	W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Woody Vine Stratum (Plot size: 15' )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
				neight.
1				
2				
3				
4				Hydrophytic
5				Vegetation
	0 .	= Total Cov	er	Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			1
Sparsely vegetated herb stratum consisting of s		inas		
oparacry vegetated herb stratam consisting or s	man sapi	ii igo.		

Depth (inches) Color (moist) % Color (moist) % Type¹ Loc² Texture  0-6 5YR 4/6 100 CL	Remarks
0-6 5YR 4/6 100 CL	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore I	
Hydric Soil Indicators: Indicators for	r Problematic Hydric Soils <sup>3</sup> :
<del>_</del>	ck (A10) <b>(MLRA 147)</b>
	airie Redox (A16)
	147, 148)
	Floodplain Soils (F19)
	136, 147)
<del>_</del>	llow Dark Surface (TF12)
<u> </u>	xplain in Remarks)
Thick Dark Surface (A12)	
Sandy Mucky Millerar (ST) (LKK N, Horr-Manganese Masses (FT2) (LKK N, MLRA 147, 148)	
	of hydrophytic vegetation and
	drology must be present,
	urbed or problematic.
Restrictive Layer (if observed):	arbed or problematic.
Type: Rock, roots	
" <del></del>	42 Vaa Na 🗸
Depth (inches): 6 Hydric Soil Presen	t? Yes No
Remarks:	

Project/Site: MVP		City/C	ounty: Franklin		Sampling Date: 04/06/2015
Applicant/Owner: MVP					Sampling Point: W-H17
Investigator(s): A.Stott, A. Gr	ech, H. Heist	Section		·	
• ,,			· · · · · ·		Slope (%): 0-4%
Subregion (LRR or MLRA): L	RRN	Lat: 36.989609			Datum: NAD83
Soil Map Unit Name: Clifford	fine sandy loa	m 15 to 25 percent slo			
Are climatic / hydrologic condit					_
					esent? Yes No
Are Vegetation, Soil				plain any answer	
SUMMARY OF FINDIN	GS – Attach si	te map showing sam	pling point location	ns, transects,	important features, etc.
Hydrophytic Vegetation Pres	ent? Yes	✓ No			
Hydric Soil Present?	Yes _		Is the Sampled Area within a Wetland?	Yes 🗸	No
Wetland Hydrology Present?	Yes _	<b>✓</b> No	within a Wetland:	163	
Remarks:		-			
Cowardin Code: PFO; F	•				
The wetland was revisite					•
confirmed using the USA	_			Portion of we	tland obstructed by
timbermatting and const	ruction activity	during 2019 field surv	ey.		
HYDROLOGY					
Wetland Hydrology Indicate	ors:		<u> </u>	Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum	of one is required;			Surface Soil C	
Surface Water (A1)		True Aquatic Plants (			etated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Odd		Drainage Patt	
Saturation (A3)		Oxidized Rhizosphere		Moss Trim Lir	
Water Marks (B1)		Presence of Reduced			Vater Table (C2)
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burro	
Drift Deposits (B3)		Thin Muck Surface (C			ible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Ren			essed Plants (D1)
Iron Deposits (B5)	(D=)		<u>-</u>	Geomorphic F	
Inundation Visible on Ae			-	Shallow Aquit	
✓ Water-Stained Leaves (E	39)		-		phic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations: Surface Water Present?	Voc. No.	Depth (inches):			
		Depth (inches):	6"		
Water Table Present?		Deptit (inches)			0 V V N-
Saturation Present? (includes capillary fringe)	Yes _ Vo _	Depth (inches):	wetland Hy	drology Present	? Yes V No
Describe Recorded Data (stre	eam gauge, monito	ring well, aerial photos, pre	vious inspections), if availa	able:	
Remarks:					
Drainage patterns have	surface water :	at 5"			
Brainage patterns have	Surface water t	at .0			

•	<u>,                                      </u>	Absolute	- Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30'	)		Species?		Number of Dominant Species		
1. Platanus occidentalis		15	~	FACW	That Are OBL, FACW, or FAC:	5	(A)
2. Acer saccharum		10	~	FACU			` '
3. Acer rubrum		10	~	FAC	Total Number of Dominant Species Across All Strata:	7	(B)
4. Carpinus caroliniana		5		FAC	Species / toross / tir Otrata.		(5)
5			-	1.7.0	Percent of Dominant Species	71	(A (D)
			-		That Are OBL, FACW, or FAC:		(A/B)
6					Prevalence Index worksheet:		
/·		40	= Total Co		Total % Cover of:	Multiply by:	
	50% of total cover: 20		total cover	_	OBL species x	1 =	_
Sapling/Shrub Stratum (Plot size		2070 01	total oovel		FACW species x		
1. Lindera benzoin	ý/	15	~	FAC	FAC species x		
2. Carpinus caroliniana		5			FACU species x		
3. Acer rubrum		5		FAC	UPL species x		
4 Liriodendron tulipifera		5	-	FAC	Column Totals: (A		
·				FACU_	Column Totals (A	·)	_ (D)
5					Prevalence Index = B/A =		_
6			-		Hydrophytic Vegetation Indica	ators:	
7					1 - Rapid Test for Hydrophy		
8					2 - Dominance Test is >50%	-	
9					3 - Prevalence Index is ≤3.0		
			= Total Co	_	4 - Morphological Adaptation		portina
	50% of total cover: 15	20% of	total cover	r: 6	data in Remarks or on a		
Herb Stratum (Plot size: 5'	)		á		Problematic Hydrophytic Ve		
1. Diphasiastrum digitatum		20		<u>UPL</u>	1 Toblematic Hydrophytic ve	getation (Expla	"")
2. Microstegium vimineum		20		F <u>AC</u>	<sup>1</sup> Indicators of hydric soil and wet	tland bydralagy	munt
3. Carex sp.		10		ND	be present, unless disturbed or p		iiusi
4. Juncus effucus		5		F <u>ACW</u>	Definitions of Four Vegetation		
5							
6					<b>Tree</b> – Woody plants, excluding more in diameter at breast heigh		
7					height.	it (DBi i), legalui	1622 OI
8.							
9.	_				Sapling/Shrub – Woody plants, than 3 in. DBH and greater than		
10					m) tall.	01 04441 10 0.20	, , , ( ,
11.					Hart All barbaras on Consumo		
		55	= Total Co	ver	<b>Herb</b> – All herbaceous (non-wood of size, and woody plants less the		raiess
	50% of total cover: 27.5						
Woody Vine Stratum (Plot size:		<del></del>			<b>Woody vine</b> – All woody vines gheight.	reater than 3.28	3 ft in
1. Lonicera japonica		40	<b>~</b>	FAC	neight.		
2			-				
0			-				
3 4							
			-	<del></del>	Hydrophytic		
5		40	Tabel C		Vegetation Present? Yes	No	
	50% of total cover: 20		= Total Cover	_	100		
			iolai cover				
Remarks: (Include photo number	is here or on a separate s	neet.)					
ND- Not Determined							

\*Vegetation not ID'd down to species level is not included in the dominance test.

SOIL Sampling Point: W-H17

Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the i	indicator	or confirn	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	<u>Remarks</u>
0-3"	2.5Y 4/1	80	7.5YR 5/6	20	С	М	SiL	
3-20"	2.5y 5/1	85	7.5YR 5/5	15	С	М	SiL	
1Type: C-C	oncentration, D=Depl	etion RM-F	Peduced Matrix MS	S-Maskar		aine	<sup>2</sup> Location: F	PL=Pore Lining, M=Matrix.
Hydric Soil		elion, Kivi=r	veduced Matrix, Mc	)=ivia5ket	J Sanu Gi	allis.		ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(\$7)				2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ce (S8) <b>(I</b>	/II RΔ 147		Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su				(	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			, <b>.,</b>	F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma		,			(MLRA 136, 147)
2 cm Mu	uck (A10) (LRR N)		Redox Dark	Surface (F	<del>-</del> 6)		\	/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar				(	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) (	LRR N,		
	A 147, 148)		MLRA 13	-			3.	
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	Redox (S5) I Matrix (S6)		Piedmont Floor Red Parent N					etland hydrology must be present, nless disturbed or problematic.
	Layer (if observed):		Red Falentin	nateriai (i	ZI) (IVILIN	A 121, 14	7) ui	liess disturbed of problematic.
Type:	Layer (ii observed).							
	ah a a \.		<del></del>				Usalvia Cai	I Present? Yes ✔ No
	ches):		<u> </u>				Hydric Soi	I Present? Yes No
Remarks:								

# **Wetland Photograph Page**

#### Wetland ID W-H17



Photograph Direction North

Date: 04/06/2015

Comments: 2015 wetland delineation.



Photograph Direction SW

Date: 11/11/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP	City/County: Fran	klin	_ Sampling Date: 04/06/2015		
Applicant/Owner: MVP		State: VA	Sampling Point: W-H17 upl		
	Section, Township,		<u> </u>		
Landform (hillslope, terrace, etc.): Shoulder- sl		=	Slope (%): 1-3%		
Subregion (LRR or MLRA): LRRN			Datum: NAD83		
Soil Map Unit Name: Clifford fine sandy loan	_				
Are climatic / hydrologic conditions on the site typic	cal for this time of year? Yes N	o (If no, explain in	Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed?	re "Normal Circumstances"	present? Yes No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (I	f needed, explain any answ	ers in Remarks.)		
SUMMARY OF FINDINGS – Attach sit	e map showing sampling poir	t locations, transect	s, important features, etc.		
Lindraphytic Vacatation Brancht?	No. V				
	No V Is the Samp				
Wetland Hydrology Present? Yes	No within a We	tland? Yes	No		
Remarks:					
Upland					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indic	cators (minimum of two required)		
Primary Indicators (minimum of one is required; of	check all that apply)	Surface Soi	, ,		
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	-	atterns (B10)		
Saturation (A3)	Oxidized Rhizospheres on Living R				
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soi	Soils (C6) Crayfish Burrows (C8)			
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Remarks)		Stressed Plants (D1)		
Iron Deposits (B5)			c Position (D2)		
Inundation Visible on Aerial Imagery (B7)		Shallow Aq	uitard (D3)		
Water-Stained Leaves (B9)		<del></del> . •	raphic Relief (D4)		
Aquatic Fauna (B13)		FAC-Neutra	al Test (D5)		
Field Observations:					
Surface Water Present? Yes No _	Depth (inches):				
	Depth (inches):		_		
	Depth (inches):	Wetland Hydrology Prese	ent? Yes No		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	l ing well, aerial photos, previous inspecti:	ons), if available:			
, ,		,			
Remarks:					

Sampling Point: W-H1
----------------------

30'	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species
1. Pinus strobus	10		FACU_	That Are OBL, FACW, or FAC:1 (A)
2. Liriodendron tulipifera	10		<u>FACU</u>	Total Niverban of Danisant
3				Total Number of Dominant Species Across All Strata: 5 (B)
4				(B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 10	20% of	total cover	: <u>      4                              </u>	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Fagus grandifolia	10	<b>✓</b>	FACU	FAC species x 3 =
	-			FACU species x 4 =
2		-		UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
7		•		Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	4.0	· -		3 - Prevalence Index is ≤3.0 <sup>1</sup>
_		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:5	20% of	total cover	:2	
Herb Stratum (Plot size: 5')				data in Remarks or on a separate sheet)
1. Diphasiastrum digitatum	40	~	UPL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
				noight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	40	= Total Cov	ver	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>20</u>	20% of	total cover	:8	
Woody Vine Stratum (Plot size: 15')				Woody vine – All woody vines greater than 3.28 ft in
1. Lonicera japonica	15	<b>/</b>	FAC	height.
			170	
2		· <del></del>		
3				
4				Hydrophytic
5.				Vegetation
	15	= Total Cov	/er	Present? Yes No
50% of total cover:		total cover	_	
		10101 00101	•——	
Remarks: (Include photo numbers here or on a separate s	neet.)			

Sampling Point: W-H17 upl

SOIL

Profile Desc	ription: (Describe t	to the dept	h needed to docun	nent the i	indicator	or confirm	n the absence	e of indicators.)
Depth	Matrix		Redox	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-3"	10yr 3/3	100					SiL	
3-20"	10yr 4/3	95	7.5yr 5/6	5	С	M	SiL	
							-	
							-	
							-	
<sup>1</sup> Type: C=C	oncentration, D=Depl	etion PM-	Peduced Matrix MS			aine	<sup>2</sup> l ocation: F	PL=Pore Lining, M=Matrix.
Hydric Soil		elion, Kivi=	Neduced Matrix, Mc	=ivia5ket	J Sanu Gi	airis.		cators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(\$7)				2 cm Muck (A10) <b>(MLRA 147)</b>
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(I</b>	MI RΔ 147		Coast Prairie Redox (A16)
Black Hi	. , ,		Thin Dark Su					(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			,,	1	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat		,			(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark S		<del>-</del> 6)		,	Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar				(	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	lucky Mineral (S1) (L	.RR N,	Iron-Mangane		es (F12)	(LRR N,		
	A 147, 148)		MLRA 136		(B. 11   D. 14		3,	
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	Redox (S5) Matrix (S6)		Piedmont Flo Red Parent M					etland hydrology must be present, nless disturbed or problematic.
	Layer (if observed):		Red Falelit iv	iateriai (i	ZI) (WILI	IA 121, 14	7) ui	niess disturbed of problematic.
Type:	Layer (ii observea).							
	-h \.						Usadaia Cai	SI Dunnanto Van Na V
	ches):						nyaric so	il Present? Yes No
Remarks:								

Project/Site: MVP	City/County:	Franklin	_ Sampling Date: 04/04/2015
Applicant/Owner: MVP			Sampling Point: W-H11
	Section, Tov	vnship, Range: N/A	
Landform (hillslope, terrace, etc.): Side-slope			Slope (%): 1-4%
Subregion (LRR or MLRA): LRRN Lat		Long: -79.70281	
Soil Map Unit Name: Clifford fine sandy loam, 1			
Are climatic / hydrologic conditions on the site typical for	or this time of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology	•	Are "Normal Circumstances"	·
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site m		g point locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	No	e Sampled Area	
Wetland Hydrology Present?	No withi	n a Wetland? Yes	No
Remarks:			
Cowardin Code: PEM; HGM: slope; WT: rp	wwd		
The wetland was revisited on 11/12/2019. F		drology, hydrophytic vegeta	ition, and hydric soils was
confirmed using the USACE EMP Regional	•		-
obstructed by a timbermat.			
HYDROLOGY			
		Socondary Indi	cators (minimum of two required)
Wetland Hydrology Indicators:	ulcall that apply)		<u> </u>
Primary Indicators (minimum of one is required; chec			il Cracks (B6)
	True Aquatic Plants (B14)	_	egetated Concave Surface (B8)
	Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on L		
	Presence of Reduced Iron (	= : :	Lines (B16)
	Recent Iron Reduction in Til		n Water Table (C2)
			urrows (C8) Visible on Aerial Imagery (C9)
Drift Deposits (B3) Algal Mat or Crust (B4)	Thin Muck Surface (C7) Other (Explain in Remarks)		Stressed Plants (D1)
Iron Deposits (B5)	Other (Explain in Remarks)		c Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Ac	
Water-Stained Leaves (B9)			raphic Relief (D4)
Aquatic Fauna (B13)		✓ FAC-Neutr	. , ,
Field Observations:			a. 1001 (20)
	Depth (inches):		
	Depth (inches):		
Saturation Present? Yes V No		Wetland Hydrology Pres	ent? Yes ✔ No
(includes capillary fringe)	_ Deptil (iliches)	Wettand Hydrology Fresh	ent: TesNo
Describe Recorded Data (stream gauge, monitoring v	well, aerial photos, previous i	nspections), if available:	
Remarks:			
In power line corridor			
lin pewer inte comider			

#### **VEGETA**

	Absolute	Dominant Indicator	Dominance Test worksho	g Point: W-H11	
Free Stratum (Plot size: 30')		Species? Status	Number of Dominant Spec		
			That Are OBL, FACW, or F	^	(A)
·			T		, ,
		- <u> </u>	Total Number of Dominant Species Across All Strata:	3	(B)
			opeoico / toroso / tir otrata.		(5)
			Percent of Dominant Spec		(
			That Are OBL, FACW, or F	AC: 0170	(A/B)
			Prevalence Index worksh	neet:	
<u>.                                      </u>		= Total Cover	Total % Cover of:	Multiply by:	
50% of total cover:			OBL species	x 1 =	_
Sapling/Shrub Stratum (Plot size: 15' )	2070 01	r total cover.	FACW species		
Dana was skillana	5	✓ FACU	FAC species		
-			FACU species		
		<del></del>	'	x 5 =	_
		· ——	Column Totals:	<u> </u>	_
•		<del></del>	Column Totals.	(^)	_ (D)
		<del></del>	Prevalence Index =	B/A =	_
·		<u> </u>	Hydrophytic Vegetation	ndicators:	
•		<del></del>	1 - Rapid Test for Hyd		
·		·	2 - Dominance Test is		
			3 - Prevalence Index i		
		= Total Cover	4 - Morphological Ada		nortina
50% of total cover:	2.5 20% of	f total cover: 1		on a separate sheet)	porting
lerb Stratum (Plot size: 5' )				•	\
. Microstegium vimineum	50	<u></u> F <u>AC</u>	Problematic Hydrophy	tic Vegetation* (Explai	n)
_Juncus effusus	20	FACW	1		
Scirpus cyperinus	10	FACW	<sup>1</sup> Indicators of hydric soil ar be present, unless disturbe		nust
Verbesina alternifolia	5	FAC	Definitions of Four Veger	•	
Ludwigia alternifolia	<u> </u>	FACW	Definitions of Four Vege	tation Strata:	
			Tree - Woody plants, excl		
Scirpus atrovirens		OBL	more in diameter at breast		
Scirpus atrovirens		OBL			
Scirpus atrovirens		OBL	more in diameter at breast height.  Sapling/Shrub – Woody p	height (DBH), regardle	ess of
Scirpus atrovirens		OBL	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater	height (DBH), regardle	ess of
Scirpus atrovirens		OBL	more in diameter at breast height.  Sapling/Shrub – Woody p	height (DBH), regardle	ess of
Scirpus atrovirens		OBL	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no	height (DBH), regardle lants, excluding vines than or equal to 3.28 n-woody) plants, regard	ess of less ft (1
Scirpus atrovirens  0. 1.		OBL	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.	height (DBH), regardle lants, excluding vines than or equal to 3.28 n-woody) plants, regard	ess of less ft (1
Scirpus atrovirens		OBL	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no	height (DBH), regardle lants, excluding vines than or equal to 3.28 n-woody) plants, regardless than 3.28 ft tall.	less of tt (1
Scirpus atrovirens	95 17.5 20% of	= Total Cover f total cover: 19	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no of size, and woody plants l	height (DBH), regardle lants, excluding vines than or equal to 3.28 n-woody) plants, regardless than 3.28 ft tall.	less of tt (1
Scirpus atrovirens	95 17.5 20% of	= Total Cover f total cover: 19	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no of size, and woody plants I Woody vine – All woody v	height (DBH), regardle lants, excluding vines than or equal to 3.28 n-woody) plants, regardless than 3.28 ft tall.	less of tt (1
Scirpus atrovirens	95 17.5 20% of	= Total Cover f total cover: 19	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no of size, and woody plants I Woody vine – All woody v	height (DBH), regardle lants, excluding vines than or equal to 3.28 n-woody) plants, regardless than 3.28 ft tall.	less of tt (1
Scirpus atrovirens  S	95 17.5 20% of	= Total Cover f total cover: 19	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no of size, and woody plants I Woody vine – All woody v	height (DBH), regardle lants, excluding vines than or equal to 3.28 n-woody) plants, regardless than 3.28 ft tall.	less of tt (1
Scirpus atrovirens  Substituting Solution Stratum (Plot size:15')  Substituting Solution Stratum (Plot size:15')	95 17.5 20% of	= Total Cover f total cover: 19	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no of size, and woody plants I Woody vine – All woody vheight.	height (DBH), regardle lants, excluding vines than or equal to 3.28 n-woody) plants, regardless than 3.28 ft tall.	less of tt (1
Scirpus atrovirens  Solve of total cover:4  Voody Vine Stratum (Plot size:15')  Solve of total cover:4  Solve of total cover:4  Solve of total cover:4	95 17.5 20% of	= Total Cover f total cover: 19	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no of size, and woody plants I Woody vine – All woody vheight.	height (DBH), regardle lants, excluding vines than or equal to 3.28 n-woody) plants, regardless than 3.28 ft tall.	less of tt (1
Scirpus atrovirens  S	95 17.5 20% of	= Total Cover f total cover: 19	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no of size, and woody plants I Woody vine – All woody vheight.	height (DBH), regardle lants, excluding vines than or equal to 3.28 n-woody) plants, regardless than 3.28 ft tall. ines greater than 3.28	less of tt (1
Scirpus atrovirens  7.  8.  9.  10.  11.  50% of total cover:4  Woody Vine Stratum (Plot size:15')  1.  2.  8.  8.  9.	95 17.5 20% of	= Total Cover f total cover: 19	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no of size, and woody plants I Woody vine – All woody vheight.  Hydrophytic Vegetation	height (DBH), regardle lants, excluding vines than or equal to 3.28 n-woody) plants, regardless than 3.28 ft tall. ines greater than 3.28	less of tt (1
50% of total cover:	95 17.5 20% of 0 0 20% of 0	= Total Cover f total cover: 19	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no of size, and woody plants I Woody vine – All woody vheight.  Hydrophytic Vegetation	height (DBH), regardle lants, excluding vines rethan or equal to 3.28 n-woody) plants, regardless than 3.28 ft tall. ines greater than 3.28	less of tt (1
Scirpus atrovirens  S	95 17.5 20% of 0 0 20% of 0	= Total Cover f total cover: 19	more in diameter at breast height.  Sapling/Shrub – Woody p than 3 in. DBH and greater m) tall.  Herb – All herbaceous (no of size, and woody plants I Woody vine – All woody vheight.  Hydrophytic Vegetation	height (DBH), regardle lants, excluding vines rethan or equal to 3.28 n-woody) plants, regardless than 3.28 ft tall. ines greater than 3.28	less of the fit (1) the fit (1

SOIL Sampling Point: W-H11

Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the i	indicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6"	5YR 4/2	80	5YR 4/6	20	С	М	SiL	
6-20"	7.5YR 4/2	80	5YR 4/6	20	С	М	SL	
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion RM-F	Reduced Matrix MS	S-Masker		ains	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil		ouon, min-i	Codeca Matrix, Mc	)=IVIdSRCC	J Garia Gi	airio.		ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(\$7)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ce (S8) <b>(I</b>	/ILRA 147.		Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su					(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			, -,	F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma	trix (F3)	, ,			(MLRA 136, 147)
2 cm Mu	uck (A10) (LRR N)		Redox Dark				\	/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar				0	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) (	LRR N,		
	A 147, 148)		MLRA 13	-	(NII DA 4)	100	31	Parton of budger by Carrent Carrent
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and etland hydrology must be present,
	Redox (S5) I Matrix (S6)		Piedmont Floor Red Parent N					eliand hydrology must be present, lless disturbed or problematic.
	Layer (if observed):		Red r arent n	nateriai (i	Z1) (IVILIN	A 121, 14	7) un	ness disturbed of problematic.
Type:	_ayo: ( oboo. roa).							
	ches):		<del></del>				Hydric Soil	Present? Yes V No
	Ci les).		<del></del>				Hydric 30ii	rriesent: res NO
Remarks:								

# **Wetland Photograph Page**

#### Wetland ID W-H11



Photograph Direction North

Date: 04/04/2015

Comments: 2015 wetland delineation.



Photograph Direction NW

Date: 11/12/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP		City/C	county: Franklin		Sampling Date: 04/04/2015		
Applicant/Owner: MVP					Sampling Point: W-H11 upl		
Investigator(s): A.Stott, A. Grech,	H. Heist	Section	on Township Range N/	<u> </u>	<u> </u>		
Landform (hillslope, terrace, etc.): Sid					Slone (%): 5-10%		
Subregion (LRR or MLRA): LRRN					Datum: NAD83		
Soil Map Unit Name: Clifford fine sa							
Are climatic / hydrologic conditions on t		· ·			·		
Are Vegetation, Soil, or	Hydrology	significantly distur	bed? Are "Normal	Circumstances"	oresent? Yes No		
Are Vegetation, Soil, or	Hydrology	naturally problema	atic? (If needed, e	explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS - A	ttach site m	ap showing sam	npling point location	ns, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes	No. V					
Hydric Soil Present?	Yes		Is the Sampled Area	.,	🗸		
Wetland Hydrology Present?	Yes	No V	within a Wetland?	Yes	No		
Remarks:							
Upland							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is	s required; check	call that apply)		Surface Soil			
Surface Water (A1)	-	True Aquatic Plants (	B14)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pa			
Saturation (A3)			es on Living Roots (C3)	Moss Trim L			
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reductio	n in Tilled Soils (C6)	Crayfish Burrows (C8)			
Drift Deposits (B3)	_	Thin Muck Surface (C	27)	Saturation V	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)	Stunted or S	tressed Plants (D1)		
Iron Deposits (B5)				Geomorphic	Position (D2)		
Inundation Visible on Aerial Imag	ery (B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B9)				<pre> Microtopographic Relief (D4) FAC-Neutral Test (D5)</pre>			
Aquatic Fauna (B13)			<u></u>	FAC-Neutra	Test (D5)		
Field Observations:	<b>/</b>	Death (Seekee)					
Surface Water Present? Yes _	No	Depth (inches):					
		Depth (inches):					
Saturation Present? Yes _ (includes capillary fringe)	No	Depth (inches):	Wetland H	lydrology Presei	nt? Yes No		
Describe Recorded Data (stream gau	ge, monitoring w	vell, aerial photos, pre	vious inspections), if ava	ilable:			
Remarks:							
Remarks.							

Sampling	Point: W-H11 up	ı
----------	-----------------	---

001	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:0 (A)
2				
				Total Number of Dominant Species Across All Strata: 3 (B)
3				Species Across All Strata:3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:0 (A/B)
6				Basedon a la decessada ha et
7				Prevalence Index worksheet:
	0	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:0	20% of	total cover:	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' )				FACW species x 2 =
1. Rosa multiflora	10	<b>/</b>	FACU	FAC species x 3 =
2. Rubus allegheniensis	10	<u> </u>		FACU species x 4 =
			F <u>ACU</u>	
3				
4				Column Totals: (A) (B)
5				Dravelance Index D/A
6				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8		-		2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov	er	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 10	20% of	total cover:	4	
Herb Stratum (Plot size: 5' )				data in Remarks or on a separate sheet)
1. Andropogon virginicus	70	<b>✓</b>	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
			· <u></u>	
2				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				<b>-</b> W
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				iii) taii.
11				Herb - All herbaceous (non-woody) plants, regardless
		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 35	20% of	total cover:	14	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:15')				height.
1				
2		<u> </u>		
3				
4				Hydrophytic
5				Vegetation
		= Total Cov		Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			I

Sampling Point: W-H11 upl

Profile Desc	ription: (Describe t	o the depth i	needed to docum	nent the i	ndicator	or confirm	the absence	of indicators.)	
Depth	Matrix		Redo	x Features		. 2		_	
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Re	marks
0-12"	5yr 4/3	100			RM	М	S		
12+"								Re	fusal CF
					-				
									_
					-				<del>-</del>
<sup>1</sup> Type: C=C	oncentration, D=Depl	etion RM-Re	educed Matrix MS	S-Masked	Sand Gr	ains	<sup>2</sup> Location: P	L=Pore Lining, M=	-Matrix
Hydric Soil		etion, ixivi–ixe	suuceu Mainx, Mc	J-IVIASKEU	Sand Oi	airis.			natic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(S7)				cm Muck (A10) (N	-
	pipedon (A2)	•	Polyvalue Be		ce (S8) <b>(I</b>	MLRA 147		Coast Prairie Redo	-
Black Hi		•	Tolyvalde Be Thin Dark Su				, 0	(MLRA 147, 148	
	en Sulfide (A4)	•	Loamy Gleye			,,	. P	Piedmont Floodplai	-
	d Layers (A5)	•	Depleted Mat		,		<del></del>	(MLRA 136, 147	
2 cm Mu	ıck (A10) (LRR N)		Redox Dark S	Surface (F	6)		v	ery Shallow Dark	Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar				c	Other (Explain in R	emarks)
	ark Surface (A12)		Redox Depre						
	lucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) (	LRR N,			
	A 147, 148)		MLRA 13	•			3, ,		
-	Gleyed Matrix (S4)		Umbric Surfa						ytic vegetation and
-	Redox (S5) Matrix (S6)	•	Piedmont Flo Red Parent N					etland hydrology m	·
	Layer (if observed):	•	Red Paleill N	nateriai (F.	21) (IVILI	A 127, 147	) un	less disturbed or p	orobiematic.
	efusal: coarse fra	aments							
		gillorito	_						/
	ches): 12"		=				Hydric Soil	Present? Yes	No
Remarks:									

Project/Site: MVP	City/County: Franklin Sampling Date: 04/04/					
Applicant/Owner: MVP	State: VA Sampling Point: W					
Investigator(s): A.Stott, A. Grech, H. Heist Section, Township, Range: N/A						
Landform (hillslope, terrace, etc.): Side-slope  Local relief (concave, convex, none): Concave						
Subregion (LRR or MLRA): LRRN						
	complex, 25 to 45 percent slopes					
Are climatic / hydrologic conditions on the site type	oical for this time of year? Yes No (	If no, explain in Rem	arks.)			
	y significantly disturbed? Are "Normal		_			
	y naturally problematic? (If needed, e					
	ite map showing sampling point locatio					
Lludronhutia Vagatatian Propert2	V No lo the Semulad Area					
	Is the Sampled Area	Yes 🗸	NI -			
Wetland Hydrology Present? Yes	within a Welland:	res	NO			
Remarks:						
Cowardin Code: PEM; HGM: riverine;	•					
The wetland was revisited on 11/12/20	119. Presence of wetland hydrology, hydrop	hytic vegetation	, and hydric soils was			
confirmed using the USACE EMP Reg	ional Supplement delineation methodology	<b>'.</b>				
LIVERGLOOV						
HYDROLOGY  Wetland Hydrology Indicators:		Cacandary Indicator	a (minimum of two required)			
			s (minimum of two required)			
Primary Indicators (minimum of one is required		Surface Soil Cra				
Surface Water (A1)  High Water Table (A2)			ated Concave Surface (B8)			
Saturation (A3)	<ul><li>Hydrogen Sulfide Odor (C1)</li><li>Oxidized Rhizospheres on Living Roots (C3)</li></ul>	Drainage Patter				
		Moss Trim Line:				
Water Marks (B1) Sediment Deposits (B2)	<ul><li>Presence of Reduced Iron (C4)</li><li>Recent Iron Reduction in Tilled Soils (C6)</li></ul>	Dry-Season Wa Crayfish Burrow				
Sediment Deposits (B2) Drift Deposits (B3)	Thin Muck Surface (C7)	· ·	le on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Remarks)		ssed Plants (D1)			
Iron Deposits (B5)	Other (Explain in Nemarks)	<del></del>	• •			
Inundation Visible on Aerial Imagery (B7)		<ul><li>Geomorphic Position (D2)</li><li>Shallow Aquitard (D3)</li></ul>				
Water-Stained Leaves (B9)		Microtopographic Relief (D4)				
✓ Aquatic Fauna (B13)		FAC-Neutral Test (D5)				
Field Observations:			ot (20)			
	Depth (inches):					
	Depth (inches): 6"					
	0.11	ydrology Present?	Yes ✔ No			
(includes capillary fringe)			103			
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspections), if avai	lable:				
Remarks:						
In power line corridor						
Connecte to a h2C						
Connects to s-h36						

#### VEGETATION (Four Strata) – Use scientific names of plants

/EGETATION (Four Strata) – Use scientific n	ames of	plants.		Sampling Point: W-H16
201		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30' )	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5		-		That Are OBL, FACW, or FAC: 100% (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov	_	OBL species x 1 =
50% of total cover: 0	20% of	total cover	. 0	
Sapling/Shrub Stratum (Plot size: 15' )				FACW species x 2 = FAC species x 3 =
1				
2				FACU species x 4 =
3		-		UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6			·	Hydrophytic Vegetation Indicators:
7			·	1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2		= Total Cov	_	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 0	20% of	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5')	40	,		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Microstegium vimineum	40		F <u>AC</u>	Troblemane Hydrophysic Vogetation (Explain)
2. Juncus effusus	30		F <u>ACW</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Cyperus esculentus	<u>15</u>		FACW_	be present, unless disturbed or problematic.
4. Ludwigia alternifolia			F <u>ACW</u>	Definitions of Four Vegetation Strata:
5. Impatiens capensis	5		F <u>ACW</u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7			·	height.
8		-		Sapling/Shrub – Woody plants, excluding vines, less
9		-		than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				<b>Herb</b> – All herbaceous (non-woody) plants, regardless
		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 47.5	20% of	total cover	19	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:15')				height.
1				
2				
3			·	
4		-		Hydrophytic
5				Vegetation
2		= Total Cov	_	Present? Yes No
50% of total cover: 0	20% of	total cover	. 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

SOIL Sampling Point: W-H16

Depth	ription: (Describe to Matrix	o tile depti		x Feature		or commi	i tile absence	or indicators.	•
(inches)	Color (moist)	%	Color (moist)	<u> %</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0-4"	10YR 3/1	90	7.5YR 3/4	10	С	M	S		
4-16"	Gley 1 3/10y	100	_		С	M	s		
16+"									Refusal cf
10+									Neiusai G
								-	
1Typo: C-C	oncentration, D=Deple	tion DM-E	Poducod Matrix MS	S-Mackac	I Sand G	raine	<sup>2</sup> Location: DI	L=Pore Lining,	M-Matrix
Hydric Soil		elion, Rivi=r	Reduced Matrix, Mc	S=Wasket	Sand G	airis.			lematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(87)					) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ce (S8) (1	MI RΔ 147		ciii Muck (A16 Coast Prairie Re	
Black Hi			Thin Dark Su				140, 0	(MLRA 147,	
	n Sulfide (A4)		Loamy Gleye			141, 140)	Р	•	plain Soils (F19)
	d Layers (A5)		Depleted Mat		/			(MLRA 136,	
	ick (A10) (LRR N)		Redox Dark S		<del>-</del> 6)		V		ark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)			ther (Explain i	
	ark Surface (A12)		Redox Depre	ssions (F	8)				
	lucky Mineral (S1) <b>(Li</b>	RR N,	Iron-Mangan		es (F12)	(LRR N,			
	A 147, 148)		MLRA 13	-					
	Sleyed Matrix (S4)		Umbric Surfa						ophytic vegetation and
Sandy R			Piedmont Flo						y must be present,
	Matrix (S6)		Red Parent N	/laterial (F	21) <b>(ML</b> F	RA 127, 147	7) uni	ess disturbed	or problematic.
	_ayer (if observed):	amonto							
	efusal: coarse frag	gments							
Depth (inc	ches): <u>16"</u>		<u> </u>				Hydric Soil	Present? Y	res
Remarks:									

# **Wetland Photograph Page**

#### Wetland ID W-H16



Photograph Direction SW

Date: 04/04/2015

Comments: 2015 wetland delineation.



Photograph Direction West

Date: 11/12/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP		City/C	county: Franklin		Sampling Date: 04/04/2015			
Applicant/Owner: MVP		State: VA			Sampling Point: W-H15 UP			
Investigator(s): A.Stott, A. Grech	, H. Heist	Section	on, Township, Range: N/		<u> </u>			
Landform (hillslope, terrace, etc.): Si					Slone (%): 5-7%			
Subregion (LRR or MLRA): LRRN					Datum: NAD83			
Soil Map Unit Name: Clifford fine								
			_					
Are climatic / hydrologic conditions or		•			·			
Are Vegetation, Soil,	or Hydrology	significantly distur	bed? Are "Normal	Circumstances"	oresent? Yes No			
Are Vegetation, Soil,	or Hydrology	naturally problema	atic? (If needed, e	explain any answe	ers in Remarks.)			
SUMMARY OF FINDINGS -	Attach site m	nap showing san	npling point location	ons, transects	s, important features, etc.			
Hydrophytic Vegetation Present?	Yes	No.						
Hydric Soil Present?	Yes		Is the Sampled Area		No. V			
Wetland Hydrology Present?	Yes	No	within a Wetland?	res	NO			
Remarks:					-			
Upland								
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one	is required; checl	k all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)		True Aquatic Plants (	B14)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Patterns (B10)				
Saturation (A3)			es on Living Roots (C3)	Moss Trim L	ines (B16)			
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season Water Table (C2)				
Sediment Deposits (B2)		Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Burrows (C8)				
Drift Deposits (B3)		Thin Muck Surface (C	C7)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)		Other (Explain in Rer	marks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)				<ul><li>Geomorphic Position (D2)</li><li>Shallow Aquitard (D3)</li></ul>				
Inundation Visible on Aerial Ima	gery (B7)							
Water-Stained Leaves (B9)				Microtopographic Relief (D4)				
Aquatic Fauna (B13)				FAC-Neutra	Test (D5)			
Field Observations:								
Surface Water Present? Yes	No	Depth (inches):						
		Depth (inches):						
		Depth (inches):	Wetland H	Wetland Hydrology Present? Yes No				
(includes capillary fringe)  Describe Recorded Data (stream ga	uge, monitoring v	vell, aerial photos, pre	vious inspections), if ava	ilable:				
Remarks:								

Sampling F	Point: W-H15 UPL
------------	------------------

30,	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC:2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				、,
5		-		Percent of Dominant Species That Are OBL FACW or FAC: 50 (A/B)
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
500/ ()		= Total Cov		OBL species x 1 =
50% of total cover: 0	20% of	total cover	0	FACW species x 2 =
Sapining/Sition Stratum (Flot Size)	00	,		-
1. Rubus allegheniensis	20		FACU_	FAC species x 3 =
2. Pinus taeda	20		F <u>AC</u>	FACU species x 4 =
3. Quercus velutina	10		<u>UPL</u>	UPL species x 5 =
4. Quercus boyntonii	5		UPL	Column Totals: (A) (B)
5				
				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: <u>27.</u> 5	5 20% of	total cover:	11	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5' )				•
1. Andropogon virginicus	45		F <u>ACU</u>	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2				
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	45	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>22.</u> 5		total cover:		
Woody Vine Stratum (Plot size: 15')				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1. Lonicera japonica	5	<b>✓</b>	FAC	neight.
			1710	
		-		
3	·			
4				Hydrophytic
5				Vegetation
		= Total Cov	er	Present? Yes No
50% of total cover: 2.5	20% of	total cover:	1	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

SOIL Sampling Point: W-H15 UPL

Profile Desc	ription: (Describe t	o the depth	needed to docum	nent the i	ndicator	or confirm	the ab	sence of indicators.)	
Depth	Matrix		Redo	x Feature:	s				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text		
0-10"	7.5yr 4/4	100			С	M	S	S	
10+"			_	·	·-	·		Refusal CF	-
				-	-	· ——	-		
					-		-		
					-				
	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	<sup>2</sup> Locat	tion: PL=Pore Lining, M=Matrix.	
Hydric Soil								Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol			Dark Surface					2 cm Muck (A10) (MLRA 147)	
	oipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)	
	stic (A3)		Thin Dark Su			47, 148)		(MLRA 147, 148)	
	en Sulfide (A4)		Loamy Gleye	,	F2)			Piedmont Floodplain Soils (F19)	
	d Layers (A5)		Depleted Mat		\			(MLRA 136, 147)	
	ick (A10) (LRR N)	(044)	Redox Dark S					Very Shallow Dark Surface (TF12)	
	d Below Dark Surface ark Surface (A12)	(A11)	Depleted Dar Redox Depre					Other (Explain in Remarks)	
	fucky Mineral (S1) <b>(L</b>	DD N	Iron-Mangan			IDDN			
	147, 148)	ixix i <b>x</b> ,	MLRA 13		es (i iz) <b>(</b>	LIXIX IN,			
	Gleyed Matrix (S4)		Umbric Surfa	•	MIRA 13	6 122)		<sup>3</sup> Indicators of hydrophytic vegetation and	
	Redox (S5)		Piedmont Flo				8)	wetland hydrology must be present,	
-	Matrix (S6)		Red Parent N					unless disturbed or problematic.	
	Layer (if observed):			(-	, (	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	í		
	efusal : coarse fra	gments							
,	ches): 10"	<u> </u>					Hydri	ic Soil Present? Yes No 🗸	
			<del></del>				iiyuii	ic con resent: res No	
Remarks:									

Project/Site: MVP	City/C	county: Franklin		Sampling Date: 04/04/2015			
Applicant/Owner: MVP				Sampling Point: W-H14			
Investigator(s): A.Stott, A. Grech, H. Heist Section, Township, Range: N/A							
Landform (hillslope, terrace, etc.): Side-slo	ief (concave, convex, none	e): Concave	Slope (%): 0-2%				
Subregion (LRR or MLRA): LRRN				Datum: NAD83			
Soil Map Unit Name: Clifford-Hickorykno							
Are climatic / hydrologic conditions on the site	e typical for this time of year? Y	res	no, explain in R	emarks.)			
Are Vegetation, Soil, or Hydro				_			
Are Vegetation, Soil, or Hydro							
SUMMARY OF FINDINGS – Attacl							
Hydrophytic Vegetation Present? Yes	es No No						
	es No	Is the Sampled Area	Yes 🗸				
	es No No	within a Wetland?	Yes	No			
Remarks:							
Cowardin Code: PEM; HGM: riverin	e; WT: rpwwd						
The wetland was revisited on 11/12	/2019. Presence of wetlar	nd hydrology, hydrop	hytic vegetati	on, and hydric soils was			
confirmed using the USACE EMP R	Regional Supplement delir	neation methodology.					
HYDROLOGY		_					
Wetland Hydrology Indicators:		_		tors (minimum of two required)			
Primary Indicators (minimum of one is requi			Surface Soil				
Surface Water (A1)	True Aquatic Plants (			getated Concave Surface (B8)			
High Water Table (A2)	Hydrogen Sulfide Odd		Drainage Par				
Saturation (A3)	Oxidized Rhizosphere	= : : :	Moss Trim Li				
Water Marks (B1) Sediment Deposits (B2)	<ul><li>Presence of Reduced</li><li>Recent Iron Reduction</li></ul>		Dry-Season Crayfish Buri	Water Table (C2)			
Orift Deposits (B3)	Thin Muck Surface (C		-				
Algal Mat or Crust (B4)	Other (Explain in Ren		<ul><li>Saturation Visible on Aerial Imagery (C9)</li><li>Stunted or Stressed Plants (D1)</li></ul>				
Iron Deposits (B5)	Outlot (Explain in Non	(	Geomorphic				
Inundation Visible on Aerial Imagery (B	7)	<del>-</del>	Shallow Aquitard (D3)				
Water-Stained Leaves (B9)	• ,	<del>-</del>	Microtopographic Relief (D4)				
Aquatic Fauna (B13)		<u>-</u>	FAC-Neutral Test (D5)				
Field Observations:				. ,			
Surface Water Present? Yes	No Depth (inches):	1"					
		6"					
Saturation Present? Yes	No Depth (inches):	0" Wetland Hy	drology Presen	it? Yes 🗸 No			
(includes capillary fringe)  Describe Recorded Data (stream gauge, mo							
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, pre	vious inspections), il availe	able:				
Remarks:	-						
In power line corridor							

Sampling P	oint: W-H14
------------	-------------

201	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Dominant
3				Species Across All Strata:3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100% (A/B)
6				Prevalence Index worksheet:
7				
_		= Total Cov		
50% of total cover: 0	20% of	total cover	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' )	4.0	<u>.</u>		FACW species x 2 =
1. Smilax rotundifolia	10		FAC	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4	-			Column Totals: (A) (B)
5				Dravalance Index D/A
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
9		= Total Cov		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 5		total cover:	_	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5' )	20 /6 01	total cover.		data in Remarks or on a separate sheet)
1. Microstegium vimineum	25	<b>~</b>	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	20	<u> </u>		
2. Juncus effusus			F <u>ACW</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Carex sp.			ND	be present, unless disturbed or problematic.
4. Eupatorium perfoliatum	5		F <u>ACW</u>	Definitions of Four Vegetation Strata:
5				Trans. Was dead and a supplication of the Company o
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8	-			Octobration Western Land
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11.				Harb All harbassaus (non woods) planta regardless
	70	= Total Cov	er	<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 35		total cover:		
Woody Vine Stratum (Plot size: 15' )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in
1				height.
2				
3				
4				Hydrophytic
5	^			Vegetation Present? Yes   ✓ No
500% - ( (-) - 1 0		= Total Cov		res <u> </u>
50% of total cover: 0		total cover		
Remarks: (Include photo numbers here or on a separate s	neet.)			
ND- Not Determined				
*Venetation not IDI-laborate accessors	الباهمانة	ا تائمال		2 4224
*Vegetation not ID'd down to species level is no	ı included	u in the d	ominanc	e test.

SOIL Sampling Point: W-H14

Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the i	ndicator	or confirm	the absen	ce of indicators.)
Depth	Matrix		Redo	x Features	3			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4"	10YR 3/1	90	7.5YR3/4	10	С	M	S	
4-20"	Gley1 3/10y	100					S	
			_					
					-	-		
						· ——		
								_
						- '		
1Type: C-C	oncentration, D=Deple	etion RM-R	educed Matrix M	S-Maskad	Sand Gr	aine	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil		euon, Kivi=K	educed Matrix, M.	3=IVIASKEU	Sand Gi	airis.		licators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(\$7)				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	/II RΔ 147	148)	Coast Prairie Redox (A16)
Black Hi			Thin Dark Su				,	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			· · · · · · · · · · · · · · · · · · ·		Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Ma		-,			(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark	. ,	6)			Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Da					Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre	essions (F	3)			
Sandy M	lucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangan	ese Masse	es (F12) <b>(</b>	LRR N,		
	\ 147, 148)		MLRA 13	6)				
	lleyed Matrix (S4)		Umbric Surfa					ndicators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					wetland hydrology must be present,
	Matrix (S6)		Red Parent I	Material (F	21) <b>(MLR</b>	A 127, 147	7)	unless disturbed or problematic.
Restrictive I	ayer (if observed):							
Type:			_					
Depth (inc	ches):		<u>—</u>				Hydric S	oil Present? Yes 🗸 No
Remarks:								

# **Wetland Photograph Page**

#### Wetland ID W-H14



Photograph Direction SE

Date: 04/04/2015

Comments: 2015 wetland delineation.



Photograph Direction East

Date: 11/12/19

Project/Site: MVP		City/C	<sub>County:</sub> Franklin		Sampling Date: 04/04/2015			
Applicant/Owner: MVP					Sampling Point: W-H14 UP			
	ech, H. Heist Section, Township, Range: N/A							
Landform (hillslope, terrace, etc.): Sid					Slope (%): 5-10%			
Subregion (LRR or MLRA): LRRN					Datum: NAD83			
Soil Map Unit Name: Clifford-Hicko			_					
Are climatic / hydrologic conditions on t			_					
Are Vegetation, Soil, or								
Are Vegetation, Soil, or								
SUMMARY OF FINDINGS – A	ttach site m	iap snowing san	ipling point location	ons, transects	, important features, etc.			
Hydrophytic Vegetation Present?	Yes		Is the Sampled Area					
Hydric Soil Present?	Yes		within a Wetland?	Yes	No			
Wetland Hydrology Present?  Remarks:	Yes	No						
Upland								
HYDROLOGY								
Wetland Hydrology Indicators:					tors (minimum of two required)			
Primary Indicators (minimum of one is	-			Surface Soil				
Surface Water (A1)		True Aquatic Plants (		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Par				
Saturation (A3)			• ,	Moss Trim Li				
Water Marks (B1) Sediment Deposits (B2)	·	Presence of Reduced Recent Iron Reduction	, ,	Dry-Season Water Table (C2)				
Drift Deposits (B3)		Thin Muck Surface (		) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)		Other (Explain in Rer			tressed Plants (D1)			
Iron Deposits (B5)	<u>—</u>		,		Position (D2)			
Inundation Visible on Aerial Imag	ery (B7)			Shallow Aquitard (D3)				
Water-Stained Leaves (B9)				Microtopographic Relief (D4)				
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)			
Field Observations:								
		Depth (inches):						
		Depth (inches):			. 1			
Saturation Present? Yes _ (includes capillary fringe)	No	Depth (inches):	Wetland H	lydrology Presen	t? Yes No			
Describe Recorded Data (stream gau	ge, monitoring v	vell, aerial photos, pre	vious inspections), if ava	ilable:				
Damada								
Remarks:								

Sampling	Point: W-H14 UPL

	Λ In a a l t a	Daminant	la dia atau	Daminanaa Taat wantahaat
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
			Otatus	Number of Dominant Species That Are OBL_FACW_or_FAC:  0 (A)
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3		. <u> </u>		Species Across All Strata: 3 (B)
4				
5				Percent of Dominant Species
J				That Are OBL, FACW, or FAC:0 (A/B)
6		· <del></del>		Prevalence Index worksheet:
7				
	0	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:0	20% of	total cover:	0	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1 Rosa multiflora	10	<b>✓</b>	FACU	FAC species x 3 =
2. Rubus allegheniensis	10	· ·		FACU species x 4 =
		· — -	F <u>ACU</u>	
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				
				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9.				
	20	= Total Cov	er er	3 - Prevalence Index is ≤3.0¹
50% of total cover:10		total cover:		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
E!	2070 01	total oover.		data in Remarks or on a separate sheet)
i leib Stratum (i lot size)	45			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Unknown	45		ND	<u> </u>
2. Andropogon virginicus	40		F <u>ACU</u>	1
3. Solidago sp.	5		ND	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4			· · <del></del>	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5		· <del></del>		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				
				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10		· <del></del>		m) tan.
11				Herb - All herbaceous (non-woody) plants, regardless
	90	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>45</u>	20% of	total cover:	18	
Woody Vine Stratum (Plot size: 15')				<b>Woody vine</b> – All woody vines greater than 3.28 ft in
				height.
1				
2		·		
3				
4				Hadran bad's
5				Hydrophytic
v	^	T		Vegetation Present? Yes No ✓
1		= Total Cov	_	165165
50% of total cover:0	20% of	total cover	. 0	
Remarks: (Include photo numbers here or on a separate s	heet.)			
ND- Not Determined				
*Vegetation not ID'd down to species level is no	t included	d in the do	ominance	e test
10gotation not ib a down to species level is no	· ii ioiuue(	a iii tiito ut	J. 1 111 101 101	J. 1001.

SOIL Sampling Point: W-H14 UPL

Profile Desc	cription: (Describe t	o the depth	n needed to docum	nent the i	ndicator	or confirm	the ab	sence of indicat	ors.)	
Depth	Matrix			x Features	3					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Remarks	
0-4"	10yr 4/4	100			<u>C</u>	M				
4-20"	7.5yr 4/3	100								
-					-					
-					-					
	oncentration, D=Depl	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	<sup>2</sup> Loca	tion: PL=Pore Lin		
Hydric Soil								Indicators for P		-
Histosol			Dark Surface		(00) (1		4.40\		(A10) (MLRA	
	pipedon (A2)		Polyvalue Be				148)		e Redox (A16)	)
	istic (A3) en Sulfide (A4)		Thin Dark Su Loamy Gleye	, ,	•	147, 148)		(MLRA 1	47, 148) Ioodplain Soils	(F10)
	d Layers (A5)		Loarny Gleye	,	· <i>~ j</i>			(MLRA 1	•	(i 1 <i>3)</i>
	uck (A10) (LRR N)		Redox Dark		6)				w Dark Surfac	e (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar						ain in Remarks	
	ark Surface (A12)		Redox Depre							
	Mucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangan		es (F12) <b>(</b>	LRR N,				
	A 147, 148)		MLRA 13	-				3		
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa Piedmont Flo				101	<sup>3</sup> Indicators of h	nydrophytic ve ology must be	
	Matrix (S6)		Red Parent N						bed or problem	·
	Layer (if observed):		Red r drene n	natorial (i	21) (IIII21)	7. 121, 141	T	dilicoo diotan	oca or problem	idio.
Type:	, , , , , , , , , , , , , , , , , , , ,									
	ches):						Hvdr	ic Soil Present?	Yes	No 🗸
Remarks:			<del></del>				,			
rtomanto.										
1										
1										

Project/Site: MVP	City/C	ounty: Franklin		Sampling Date: 04/03/2015			
Applicant/Owner: MVP				Sampling Point: W-A8			
nvestigator(s): A.Stott, A. Grech, H. Heist Section, Township, Range: N/A							
Landform (hillslope, terrace, etc.): Side-slope  Local relief (concave, convex, none): Concave  Slope (%):							
Subregion (LRR or MLRA): LRRP				Datum: NAD 83			
Soil Map Unit Name: Clifford fine sand							
Are climatic / hydrologic conditions on the				<u></u>			
Are Vegetation, Soil, or Hy				resent? Yes No			
Are Vegetation, Soil, or Hy SUMMARY OF FINDINGS – Atta			explain any answe				
Comman of Findings Atta			,, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, important reatures, etc.			
Hydrophytic Vegetation Present?	Yes No	Is the Sampled Area					
Hydric Soil Present?	Yes No	within a Wetland?	Yes	No			
Wetland Hydrology Present?  Remarks:	Yes No						
Cowardin Code: PEM; HGM: Slop	ne: WT: RPWWD						
The wetland was revisited on 11/2		nd hydrology, hydro	nhytic vegetati	on and hydric soils was			
				on, and hydric sons was			
confirmed using the USACE EMP	Regional Supplement delli	leation methodology	<b>y</b> .				
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)			
Primary Indicators (minimum of one is red	quired; check all that apply)		Surface Soil	Cracks (B6)			
Surface Water (A1)	True Aquatic Plants (I	B14)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Hydrogen Sulfide Odd		✓ Drainage Pat				
Saturation (A3)	Oxidized Rhizosphere		Moss Trim Li	· · · ·			
Water Marks (B1)	Presence of Reduced	I Iron (C4)	Dry-Season \	Water Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Burrows (C8)				
Drift Deposits (B3)	Thin Muck Surface (C	27)	Saturation Vi	sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Ren	narks)	Stunted or St	ressed Plants (D1)			
Iron Deposits (B5)			✓ Geomorphic Position (D2)				
Inundation Visible on Aerial Imagery	(B7)		Shallow Aquitard (D3)				
Water-Stained Leaves (B9)			Microtopographic Relief (D4)				
Aquatic Fauna (B13)			FAC-Neutral	Test (D5)			
Field Observations:							
	_ No _ V Depth (inches):						
Water Table Present? Yes	140 Dcpti1 (inches)	6"					
	No Depth (inches):	0" Wetland H	lydrology Presen	t? Yes <u>/</u> No			
(includes capillary fringe)  Describe Recorded Data (stream gauge,	monitoring well aerial photos pre-	vious inspections) if ava	ilable:				
Doorned Pala (on call gauge,	morning won, donar priotoc, pro	viodo inopositorio), il dva	abio.				
Remarks:							
In power line corridor. Culvert to o	lam/pool area. Wetland con	tinued to wetland se	еер.				

Samp	lina	Point.	W	'-A8
Sallib	III IU	r onn.	v v	, ,,

201	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				
3		, <u> </u>		Total Number of Dominant Species Across All Strata: 4 (B)
		-		Species Across Air Strata.
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Dravelance Index weather est
7				Prevalence Index worksheet:
	0 .	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover	. 0	OBL species15 x 1 =15
Sapling/Shrub Stratum (Plot size: 15' )				FACW species 30 x 2 = 60
1. Rosa multiflora	15	<b>✓</b>	FACU	FAC species x 3 =
	10			FACU species 25 x 4 = 100
2. Rubus allegheniensis	10		FACU_	
3				UPL species x 5 =
4				Column Totals:(A)(B)
5			· · · · · · · · · · · · · · · · · · ·	2.5
		-		Prevalence Index = B/A =2.5
6		-		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	25	= Total Cov	er	
50% of total cover:12.5	20% of	total cover	5	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5' )				data in Remarks or on a separate sheet)
1. Juncus effusus	30	<b>/</b>	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Carex lurida	15			
			<u>OBL</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Microstegium vimineum	5		FAC	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Johnson Gradu Vogotation Grata.
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		-		more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Herb – All herbaceous (non-woody) plants, regardless
	50 .	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 25		total cover		Γ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ
Woody Vine Stratum (Plot size: 15' )		10101 00101		Woody vine – All woody vines greater than 3.28 ft in
				height.
1				
2				
3				
4				Ukudaankusia
5.			· · · · · · · · · · · · · · · · · · ·	Hydrophytic Vegetation
<u> </u>	0 .	= Total Cov		Present? Yes V No
50% of total cover: 0		total cover	_	
		total cover		
Remarks: (Include photo numbers here or on a separate s	heet.)			

SOIL Sampling Point: W-A8

Profile Desc	cription: (Describe t	o the depth	needed to docur	nent the i	indicator	or confirm	the ab	osence of indicators.)
Depth	Matrix			x Feature	s			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		ture Remarks
0-12"	10YR 4/2	95	10YR 5/6	5	С	М	S	C
							-	
		<del></del>						
						<u> </u>		
			<del>.</del>					
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Locat	tion: PL=Pore Lining, M=Matrix.
Hydric Soil		,	,					Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	e (S7)				2 cm Muck (A10) (MLRA 147)
Histic E <sub> </sub>	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) <b>(I</b>	MLRA 147,	148)	Coast Prairie Redox (A16)
Black H	istic (A3)		Thin Dark Su	ırface (S9	(MLRA	147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)			Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma					(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark					Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Date					Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			I DD N		
	Mucky Mineral (S1) <b>(L</b> l <b>A 147, 148)</b>	KK N,	Iron-Mangan MLRA 13		es (F12) (	LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa	-	(MIRA 1	36 122)		<sup>3</sup> Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo				18)	wetland hydrology must be present,
-	Matrix (S6)		Red Parent N					unless disturbed or problematic.
	Layer (if observed):		_		/ (	,	<del>Í</del>	
Type:								
	ches):		<del>_</del>				Hydr	ric Soil Present? Yes 🗸 No
Remarks:			<del></del>				,	
Nemarks.								



Photograph Direction NE

Date: 04/03/2015

Comments: 2015 wetland delineation.



Photograph Direction West

Date: 11/12/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP	City/Co	ounty: Franklin		Sampling Date: 04/03/2015		
Applicant/Owner: MVP		,		Sampling Point: W-A8 UP1		
Investigator(s): A.Stott, A. Grech, H. Heis	t Section	Township Pange: N				
Landform (hillslope, terrace, etc.): Side-slope	<del></del>			Slane (%), 5-8%		
Subregion (LRR or MLRA): LRRP						
Soil Map Unit Name: Clifford fine sandy lo						
Are climatic / hydrologic conditions on the site ty	pical for this time of year? Ye	s No (	If no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hydrolo	gy significantly disturb	ed? Are "Normal	Circumstances"	present? Yes <u>'</u> No		
Are Vegetation, Soil, or Hydrolo	gy naturally problemat	ic? (If needed, e	xplain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS – Attach	site map showing sam	pling point locatio	ns, transects	s, important features, etc.		
Hydrophytic Vegetation Present? Yes	No					
	No. V	Is the Sampled Area		•/		
Wetland Hydrology Present? Yes	No	within a Wetland?	Yes	No		
Remarks:						
Upland						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is required	d; check all that apply)		Surface Soil	Cracks (B6)		
Surface Water (A1)	True Aquatic Plants (B	14)	Sparsely Ve	getated Concave Surface (B8)		
High Water Table (A2)	Hydrogen Sulfide Odo		Drainage Pa	atterns (B10)		
Saturation (A3)	Oxidized Rhizosphere		Moss Trim L			
Water Marks (B1)	Presence of Reduced		Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction		Soils (C6) Crayfish Burrows (C8)			
Drift Deposits (B3)	Thin Muck Surface (C			isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in Rem	arks)		Stressed Plants (D1)		
Iron Deposits (B5)				Position (D2)		
Inundation Visible on Aerial Imagery (B7)			Shallow Aqu			
Water-Stained Leaves (B9)				aphic Relief (D4)		
Aquatic Fauna (B13)			FAC-Neutra	Test (D5)		
Field Observations:	<b>1</b>					
Surface Water Present? Yes No	Depth (inches):	<del></del>				
	Depth (inches):					
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	Wetland H	ydrology Presei	nt? Yes No		
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, prev	ious inspections), if avai	ilable:			
Remarks:						

#### VEGETATION (Four Strata) - Use scientific names of plants.

\_\_\_\_)

1. Rubus allegheniensis 15 ✓ FACU

2. Dichanthelium clandestinum 5 FAC 3. Cirsium vulgare 3 FACU

5.\_\_\_\_\_ \_\_\_ \_\_\_\_\_

1. Celastrus orbiculatus 5 FACU

50% of total cover: 0 20% of total cover: 0

50% of total cover: 7.5 - 20% of total cover: 3

50% of total cover: 24 20% of total cover: 9.6

50% of total cover: 2.5 20% of total cover: 1

30'

Sapling/Shrub Stratum (Plot size: 15' )

Tree Stratum (Plot size: \_\_\_

Herb Stratum (Plot size: \_\_\_

1. Dactylis glomerata

nes of <sub>l</sub>	olants.		Sampling F	Point: W	/-A8 UF	21
bsolute	Dominant		Dominance Test worksheet:			
% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC		0	(A)
			Total Number of Dominant Species Across All Strata:		3	(B)
			Percent of Dominant Species That Are OBL, FACW, or FAC	):	0%	(A/E
		-	Prevalence Index workshee	t:		
0 -	Total Cov		Total % Cover of:	Mult	iply by:	
	total cover:	^	OBL species	x 1 =		
20 /0 01	iotai covci.		FACW species	x 2 =		
15	~	FACU	FAC species			
		1/100	FACU species	x 4 =		
			UPL species	x 5 =		
			Column Totals:	_		— (B)
			Column Totals.	(^) _		(B
			Prevalence Index = B/A	. =		_
			Hydrophytic Vegetation Indi	cators:		
			1 - Rapid Test for Hydrop	hytic Veg	getation	
			2 - Dominance Test is >5			
			3 - Prevalence Index is ≤	3.0 <sup>1</sup>		
	Total Cov	_	4 - Morphological Adapta	tions¹ (Pr	ovide su	pportir
20% of	total cover:	3	data in Remarks or on			
40			Problematic Hydrophytic			
40		F <u>ACU</u>			(=:-	,
5 3		F <u>ACU</u>	<sup>1</sup> Indicators of hydric soil and was be present, unless disturbed of			must
			Definitions of Four Vegetation	on Strata	a:	
			Tree – Woody plants, excludir more in diameter at breast hei height.			
			Sapling/Shrub – Woody plan than 3 in. DBH and greater tha m) tall.			
10		-	Herb - All herbaceous (non-w			ardless
	<ul> <li>Total Cov total cover:</li> </ul>		of size, and woody plants less	man 3.2	o it tall.	
-	iolai cover.	0.0	Woody vine – All woody vine height.	s greater	than 3.2	8 ft in
5		FACU	Hydrophytic			
			Vegetation	AI.	V	
	<ul><li>Total Cov total cover:</li></ul>	_	Present? Yes	No		

Remarks: (Include photo numbers here or on a separate sheet.)

Woody Vine Stratum (Plot size: 15')

SOIL Sampling Point: W-A8 UP1

Profile Desc	ription: (Describe to	the depth r	needed to document the	indicator or confirm	the abs	sence of indicators.)
Depth	Matrix		Redox Featur	es		
(inches)	Color (moist)	%	Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup>	Text	ure Remarks
0-20"	7.5YR 4/4	100			L	
1 <sub>T</sub> C. C.			dues d Matrix, MC, Mask	- d Cond Cosino	21 :	an Di Dan Linian M Matrix
Hydric Soil I		euon, KM=Re	duced Matrix, MS=Maske	eu Sana Grains.		on: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :
-			Dorle Confee - (07)			•
Histosol		-	Dark Surface (S7)	(a.a. (00) (BB) B 4 4 (E	4.40\	2 cm Muck (A10) (MLRA 147)
	ipedon (A2)	-		face (S8) (MLRA 147,	148)	Coast Prairie Redox (A16)
Black His		-	Thin Dark Surface (S			(MLRA 147, 148)
	n Sulfide (A4)	-	Loamy Gleyed Matrix	( (F2)		Piedmont Floodplain Soils (F19)
	Layers (A5)	-	Depleted Matrix (F3)	( <b>5</b> 0)		(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark Surface			Very Shallow Dark Surface (TF12)
	Below Dark Surface	(A11)	Depleted Dark Surface			Other (Explain in Remarks)
	rk Surface (A12)		Redox Depressions (			
	ucky Mineral (S1) (LI	RK N,	Iron-Manganese Mas	sses (F12) <b>(LRR N,</b>		
	147, 148)		MLRA 136)	\ (BU DA 400 400\)		3
	leyed Matrix (S4)	-	Umbric Surface (F13			<sup>3</sup> Indicators of hydrophytic vegetation and
-	edox (S5)	-		Soils (F19) (MLRA 14		wetland hydrology must be present,
	Matrix (S6)		Red Parent Material	(F21) <b>(MLRA 127, 147</b>	7)	unless disturbed or problematic.
	ayer (if observed):					
Туре:			_			
Depth (inc	hes):		=		Hydri	c Soil Present? Yes No
Remarks:						

Project/Site: MVP	City/County: Franklin Sampling Date: 04/04/2					
Applicant/Owner: MVP		/A Sampling Point: W-H15				
Investigator(s): A.Stott, A. Grech, H. Heist						
Landform (hillslope, terrace, etc.): Side-slope	Local relief (concave, convex, none): Conc	cave Slope (%): 0-2%				
Subregion (LRR or MLRA): LRRN La						
· , -	15 to 25 percent slopes NWI					
	for this time of year? Yes No (If no, expl					
	significantly disturbed? Are "Normal Circumsta					
	naturally problematic? (If needed, explain any					
	map showing sampling point locations, tran					
Hydrophytic Vegetation Present? Yes	No. In the Complet Avec					
Hydric Soil Present? Yes	is the Sampled Area	s No				
Wetland Hydrology Present? Yes	No within a Wetland? Yes	, NO				
Remarks:	<u> </u>					
Cowardin Code: PSS; HGM: riverine; WT	•					
	Presence of wetland hydrology, hydrophytic ve	-				
_	al Supplement delineation methodology. A port	ion of the wetland was				
obstructed by a timbermat.						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondar	ry Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; che	ck all that apply) Surfa	ace Soil Cracks (B6)				
Surface Water (A1)	_ True Aquatic Plants (B14) Spars	sely Vegetated Concave Surface (B8)				
✓ High Water Table (A2)	nage Patterns (B10)					
✓ Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3) Moss	Trim Lines (B16)				
Water Marks (B1)	Presence of Reduced Iron (C4) Dry-S	Season Water Table (C2)				
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6) Crayf	fish Burrows (C8)				
Drift Deposits (B3)	_ Thin Muck Surface (C7) Satur	ration Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Remarks) Stunt	ted or Stressed Plants (D1)				
Iron Deposits (B5)	<u>✓</u> Geon	morphic Position (D2)				
Inundation Visible on Aerial Imagery (B7)	Shall	Shallow Aquitard (D3)				
Water-Stained Leaves (B9)		Microtopographic Relief (D4)				
Aquatic Fauna (B13)	<u>✓</u> FAC-	Neutral Test (D5)				
Field Observations:						
Surface Water Present? Yes No						
Water Table Present? Yes No	Depth (inches):6"					
Saturation Present? Yes No		Present? Yes No				
(includes capillary fringe)	well, aerial photos, previous inspections), if available:					
Describe Recorded Data (Stream gauge, monitoring	well, aeriai priotos, previous irispections), ii avaliable.					
Remarks:						
In power line corridor						
connects to s-h36						

EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: W-H15
<b>-</b> 20. (7). (7)	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30' )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 4 (A)
2				Total Number of Dominant
3				Species Across All Strata:4 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100% (A/B)
6				Prevalence Index worksheet:
7				
		= Total Cov	ver	
50% of total cover: 0	20% of	total cover	r: <u> </u>	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' )				FACW species x 2 =
1. Alnus serrulata	20		OBL	FAC species x 3 =
2. Lindera benzoin	5		<u>FAC</u>	FACU species x 4 =
3. Smilax rotundifolia	5		FAC	UPL species x 5 =
4				Column Totals: (A) (B)
5				
6		-	-	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	30	Tatal Co		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 15		= Total Cover		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
<del></del>	20 /0 01	luiai cuvei		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5' )  1. Carex crinita	10	~	ODI	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Carex crimia 2. Impatiens capensis	10		OBL	
			FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Microstegium vimineum			FAC	be present, unless disturbed or problematic.
4. Juncus effusus	5		FACW_	Definitions of Four Vegetation Strata:
5				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				<b>Herb</b> – All herbaceous (non-woody) plants, regardless
	35	= Total Cov	ver	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>17.5</u>				Manakasina Allamankasina matantha 0.00 ft
Woody Vine Stratum (Plot size: 15' )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				110.g. M
2.			-	
3				
4				
<u> </u>				Hydrophytic Vegetation
5	0	= Total Cov	· · · · · ·	Present? Yes V No No
50% of total cover: 0		total cover	_	
		total cover		
Remarks: (Include photo numbers here or on a separate si	neet.)			

SOIL Sampling Point: W-H15

Profile Desc	ription: (Describe t	o the dept	h needed to docum	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	K Feature:	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6"	7.5YR 4/4	100					S	
6-20"	10YR 5/2	90	10YR 5/8	10	С	M	S	
	10111 0/2		101100		<u> </u>	IVI		
						· ——		
					-	<del></del>		
				-	-	-		
						<del></del>		
¹Type: C=C	oncentration, D=Depl	etion RM-	Reduced Matrix MS	-Masker	I Sand Gr	ains	<sup>2</sup> Location: Pl	L=Pore Lining, M=Matrix.
Hydric Soil		Cuon, ruii–	reduced Matrix, Me	- Wasket	i Garia Gi	airio.		ators for Problematic Hydric Soils <sup>3</sup> :
•			Dork Surface	(07)				•
Histosol	pipedon (A2)		Dark Surface Polyvalue Bel		oo (CO) <b>(N</b>	AI DA 147		cm Muck (A10) <b>(MLRA 147)</b> coast Prairie Redox (A16)
Black Hi			Polyvalue Bel		. , .		146) C	(MLRA 147, 148)
	en Sulfide (A4)				•	147, 140)	D	iedmont Floodplain Soils (F19)
	d Layers (A5)		Loamy Gleye Depleted Mat		Γ <b>∠</b> )		<u> </u>	(MLRA 136, 147)
	ick (A10) <b>(LRR N)</b>		Redox Dark S		·c)		\/	ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(Δ11)	Depleted Dar	,	,			other (Explain in Remarks)
	ark Surface (A12)	(// 11)	Redox Depre				_ 0	ther (Explain in Kemarks)
	fucky Mineral (S1) <b>(L</b>	RR N	Iron-Mangane			IRRN		
	147, 148)	ixix i <b>x</b> ,	MLRA 136		63 (I 12 <i>)</i> (	LIXIX IV,		
	Gleyed Matrix (S4)		Umbric Surfa		MIRA 13	86 122)	3Ind	icators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent M					less disturbed or problematic.
	Layer (if observed):				_ · / <b>(</b>	,	1	
Type:								
Depth (in	ahaa):						Hydric Soil	Present? Yes V No
	Liles)						Hydric 30ii	rieseitt: ies NO
Remarks:								

# **Wetland Photograph Page**

#### Wetland ID W-H15



Photograph Direction West

Date: 04/04/2015

Comments: 2015 wetland delineation.



Photograph Direction East

Date: 11/12/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP		City/C	<sub>County:</sub> Franklin		Sampling Date: 04/04/2015		
Applicant/Owner: MVP			,		Sampling Point: W-H15 UP		
Investigator(s): A.Stott, A. Grech,	, H. Heist	Section	on, Township, Range: N/		<u> </u>		
Landform (hillslope, terrace, etc.): Si					Slone (%): 5-7%		
Subregion (LRR or MLRA): LRRN					Datum: NAD83		
Soil Map Unit Name: Clifford fine s							
			_				
Are climatic / hydrologic conditions on		*			·		
Are Vegetation, Soil,	or Hydrology	significantly distur	bed? Are "Normal	Circumstances"	oresent? Yes No		
Are Vegetation, Soil,	or Hydrology	naturally problema	atic? (If needed, e	explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS -	Attach site m	nap showing san	npling point location	ons, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes	No. 🗸					
Hydric Soil Present?	Yes		Is the Sampled Area	Vaa	No 🗸		
Wetland Hydrology Present?	Yes	No 🗸	within a Wetland?	res	NO		
Remarks:							
Upland							
HYDROLOGY							
Wetland Hydrology Indicators:					ators (minimum of two required)		
Primary Indicators (minimum of one	•			Surface Soil	` '		
Surface Water (A1)		True Aquatic Plants (		Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pa			
Saturation (A3)			es on Living Roots (C3)	Moss Trim L			
Water Marks (B1)		Presence of Reduced Recent Iron Reduction		Dry-Season Water Table (C2)  soils (C6) Crayfish Burrows (C8)			
Sediment Deposits (B2) Drift Deposits (B3)		Thin Muck Surface (			isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer			stressed Plants (D1)		
Iron Deposits (B5)	_	отпот ( <u>-</u> хр.а то	ao,		Position (D2)		
Inundation Visible on Aerial Ima	gery (B7)			Shallow Aqu			
Water-Stained Leaves (B9)					aphic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutra	Test (D5)		
Field Observations:							
Surface Water Present? Yes	No	Depth (inches):					
Water Table Present? Yes	No	Depth (inches):					
	No	Depth (inches):	Wetland H	lydrology Prese	nt? Yes No		
(includes capillary fringe)  Describe Recorded Data (stream ga	uge monitoring v	vell aerial nhotos pre	vious inspections) if ava	ilahle:			
Describe Recorded Data (Stream ga	age, monitoring v	veii, aeriai priotos, pre	vious inspections), ii ava	mabic.			
Remarks:							

Sampling F	Point: W-H15 UPL
------------	------------------

30,	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC:2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				、,
5		-		Percent of Dominant Species That Are OBL FACW or FAC: 50 (A/B)
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
500/ ()		= Total Cov		OBL species x 1 =
50% of total cover: 0	20% of	total cover	0	FACW species x 2 =
Sapining/Sition Stratum (Flot Size)	00	,		-
1. Rubus allegheniensis	20		FACU_	FAC species x 3 =
2. Pinus taeda	20		F <u>AC</u>	FACU species x 4 =
3. Quercus velutina	10		<u>UPL</u>	UPL species x 5 =
4. Quercus boyntonii	5		UPL	Column Totals: (A) (B)
5				
				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: <u>27.</u> 5	5 20% of	total cover:	11	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5' )				•
1. Andropogon virginicus	45		F <u>ACU</u>	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2				
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	45	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>22.</u> !		total cover:		
Woody Vine Stratum (Plot size: 15')				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1. Lonicera japonica	5	<b>✓</b>	FAC	neight.
			1710	
		-		
3	·			
4				Hydrophytic
5				Vegetation
		= Total Cov	er	Present? Yes No
50% of total cover: 2.5	20% of	total cover:	1	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

SOIL Sampling Point: W-H15 UPL

Profile Desc	ription: (Describe t	o the depth	needed to docum	nent the i	ndicator	or confirm	the ab	sence of indicators.)	
Depth	Matrix		Redo	x Feature:	s				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text		
0-10"	7.5yr 4/4	100			С	M	S	S	
10+"			_	·	·-	·		Refusal CF	-
				-	-	· <del></del>	-		
					-		-		
					-				
	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	<sup>2</sup> Locat	tion: PL=Pore Lining, M=Matrix.	
Hydric Soil								Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol			Dark Surface					2 cm Muck (A10) (MLRA 147)	
	oipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)	
	stic (A3)		Thin Dark Su			47, 148)		(MLRA 147, 148)	
	en Sulfide (A4)		Loamy Gleye	,	F2)			Piedmont Floodplain Soils (F19)	
	d Layers (A5)		Depleted Mat		\			(MLRA 136, 147)	
	ick (A10) (LRR N)	(044)	Redox Dark S					Very Shallow Dark Surface (TF12)	
	d Below Dark Surface ark Surface (A12)	(A11)	Depleted Dar Redox Depre					Other (Explain in Remarks)	
	fucky Mineral (S1) <b>(L</b>	DD N	Iron-Mangan			IDDN			
	147, 148)	ixix i <b>x</b> ,	MLRA 13		es (i iz) <b>(</b>	LIXIX IN,			
	Gleyed Matrix (S4)		Umbric Surfa	•	MIRA 13	6 122)		<sup>3</sup> Indicators of hydrophytic vegetation and	
	Redox (S5)		Piedmont Flo				8)	wetland hydrology must be present,	
-	Matrix (S6)		Red Parent N					unless disturbed or problematic.	
	Layer (if observed):			(-	/ (	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	í		
	efusal : coarse fra	gments							
,	ches): 10"	<u> </u>					Hydri	ic Soil Present? Yes No 🗸	
			<del></del>				iiyuii	ic con resent: res No	
Remarks:									

Project/Site: MVP			City/C	ounty: Franklin		Sampling Date: 04/03/2015		
Applicant/Owner: MVP						Sampling Point: W-H9		
Investigator(s): A.Stott, A. Gre	ech, H. Heis	it	Section	n Township Range N		<u> </u>		
						Slope (%): 0-2%		
Subregion (LRR or MLRA): LI								
				=				
Soil Map Unit Name: Minnie								
Are climatic / hydrologic condition	ons on the s	ite typical for	this time of year? Y					
Are Vegetation, Soil	, or Hyd	rology	significantly disturb	oed? Are "Normal	Circumstances" p	resent? Yes No		
Are Vegetation, Soil	, or Hyd	rology	naturally problema	itic? (If needed, e	explain any answe	rs in Remarks.)		
SUMMARY OF FINDING	GS – Atta	ch site ma	ap showing sam	pling point location	ons, transects	, important features, etc.		
Hydrophytic Vegetation Prese	nt?	Yes 🗸	No					
Hydric Soil Present?		Yes 🗸	No	Is the Sampled Area	/			
Wetland Hydrology Present?		Yes 🗸	No	within a Wetland?	Yes	No		
Remarks:			<u> </u>					
Cowardin Code: PEM F	iGivi. depri	essional v	WI. IPWWII					
Information listed on this of wetland hydrology, hy Supplement delineation	drophytic <sup>•</sup>	vegetation	e data collected in n, and hydric soils	n 2015. The wetland s was confirmed usi	d was revisited ng the USACE	on 11/13/2019. Presence EMP Regional		
HYDROLOGY								
Wetland Hydrology Indicato	rs:				Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum	of one is req	uired; check	all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)		1	Γrue Aquatic Plants (I	B14)	✓ Sparsely Veg	getated Concave Surface (B8)		
High Water Table (A2)		H	Hydrogen Sulfide Odd	or (C1)	Drainage Pa	tterns (B10)		
Saturation (A3)		(	Oxidized Rhizosphere	es on Living Roots (C3)	Moss Trim Li	nes (B16)		
Water Marks (B1)		F	Presence of Reduced	Iron (C4)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)		F	Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Buri	rows (C8)		
Drift Deposits (B3)		1	Thin Muck Surface (C	<b>37</b> )	Saturation Vi	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		(	Other (Explain in Ren	narks)	Stunted or S	tressed Plants (D1)		
Iron Deposits (B5)					Geomorphic	Position (D2)		
Inundation Visible on Aer	ial Imagery (	B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B	9)				Microtopographic Relief (D4)			
Aquatic Fauna (B13)					FAC-Neutral	Test (D5)		
Field Observations:								
Surface Water Present?			Deptir (mones)	6"				
Water Table Present?	Yes	No	Deptil (iliches).	<u>"                                    </u>				
Saturation Present?	Yes	No	Depth (inches):	O" Wetland H	lydrology Presen	t? Yes <u>/</u> No		
(includes capillary fringe)  Describe Recorded Data (stre	am gauge, r	nonitorina we	ell. aerial photos, pre	 vious inspections). if ava	ilable:			
(***	33.,	3	, , , , , ,	.,, .,,				
Remarks:								
Vernal pool- frogs and ta	adpoles							

#### **VEGETATION** (Four Strata) – Use scientific names of plants.

Sampling Point: W-H9

201	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Number of Dominant Species		
1				That Are OBL, FACW, or FAC:	3	(A)
2						
3				Total Number of Dominant Species Across All Strata:	3	(B)
		-		Species Across Air Strata.		(D)
4				Percent of Dominant Species	1000/	
5				That Are OBL, FACW, or FAC:	100%	(A/B)
6				Prevalence Index worksheet:		
7	·				NA desertation	
	0	= Total Co	ver	Total % Cover of:		
50% of total cover:0	20% of	total cove	r: <u> </u>	OBL species x ^		
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2	2 =	_
1				FAC species x 3	3 =	_
				FACU species x 4	4 =	
2				UPL species x 5		
3						
4				Column Totals: (A)	'	_ (D)
5	·			Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indicat		<del>-</del>
7						
8				1 - Rapid Test for Hydrophyti	-	
				2 - Dominance Test is >50%		
9	_			3 - Prevalence Index is ≤3.0 <sup>1</sup>		
		= Total Co		4 - Morphological Adaptation	ıs¹ (Provide sup	porting
50% of total cover: 0	20% of	total cove	r: <u> </u>	data in Remarks or on a s	separate sheet)	
Herb Stratum (Plot size: 5' )	_			Problematic Hydrophytic Veg	•	in)
1. Microstegium vimineum	5		FAC	robiemale riyarepriyile veg	jotation (Explai	,
2. Ludwigia alternifolia	5		FACW_	1		
3. Juncus effusus	5		<b>FACW</b>	<sup>1</sup> Indicators of hydric soil and wetle be present, unless disturbed or p		nust
4				Definitions of Four Vegetation		
5				Definitions of Four Vegetation	Strata:	
				Tree - Woody plants, excluding v	vines, 3 in. (7.6	cm) or
6				more in diameter at breast height	(DBH), regardl	ess of
7				height.		
8	· ———			Sapling/Shrub – Woody plants,	excluding vines	, less
9				than 3 in. DBH and greater than of	or equal to 3.28	ft (1
10	·			m) tall.		
11				Herb – All herbaceous (non-wood	dv) plants rega	rdless
	15	= Total Co	ver	of size, and woody plants less that		
50% of total cover: 7.5	20% of	total cove	r: <u>      3                              </u>	l.,		
Woody Vine Stratum (Plot size: 15' )				<b>Woody vine</b> – All woody vines grapheight.	reater than 3.28	ft in
1				neight.		
2		-				
3	-					
4	· <del></del>			Hydrophytic		
5				Vegetation		
	0	= Total Co	ver	Present? Yes	No	
50% of total cover:0	20% of	total cove	r: <u> </u>			
Remarks: (Include photo numbers here or on a separate s	sheet.)					
` '	,					

SOIL Sampling Point: W-H9

Profile Desc	ription: (Describe to	the dept	h needed to docun	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix			x Feature:	s			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-5"	Gley1 4/10y	100					SC	
5-20"	Grey 1 4/10y	90	10YR 4/6	10	С	PL	S	Refusal CF
-							-	
							-	
1			De desert Matrix MC			<del></del>	21 1' DI	Describition M. Marin
Hydric Soil I	ncentration, D=Deple	etion, RM=	Reduced Matrix, MS	s=Masked	Sand Gr	ains.		_=Pore Lining, M=Matrix. ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(97)				cm Muck (A10) (MLRA 147)
	ipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	II RA 147.		oast Prairie Redox (A16)
Black His			Thin Dark Su					(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			, -,	Pi	iedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Mat	rix (F3)	,		· <del></del>	(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark S					ery Shallow Dark Surface (TF12)
	Below Dark Surface	(A11)	Depleted Dar				0	ther (Explain in Remarks)
	rk Surface (A12)		Redox Depre					
	lucky Mineral (S1) <b>(Li</b> . <b>147, 148)</b>	KK N,	Iron-Mangane MLRA 130		es (F12) <b>(</b>	LKK N,		
	leyed Matrix (S4)		Umbric Surfa	-	MIRA 13	6. 122)	<sup>3</sup> Indi	cators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					tland hydrology must be present,
	Matrix (S6)		Red Parent M					ess disturbed or problematic.
Restrictive L	ayer (if observed):							
Type:								
Depth (inc	ches):						Hydric Soil	Present? Yes <u>✓</u> No
Remarks:							<u> </u>	



Photograph Direction West

Date: 04/03/2015

Comments: 2015 wetland delineation.



Photograph Direction South

Date: 11/13/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP		City/C	county: Franklin		Sampling Date: 04/03/2015			
Applicant/Owner: MVP					Sampling Point: W-H9 UPL			
Investigator(s): A.Stott, A. Grech	, H. Heist				<u> </u>			
Landform (hillslope, terrace, etc.): Si					Slone (%): 10-15%			
Subregion (LRR or MLRA): LRRN		. 36 978517	-79	682	Datum: NAD83			
Soil Map Unit Name: Minnieville-C				<del></del> '				
Are climatic / hydrologic conditions or								
Are Vegetation, Soil,	or Hydrology	significantly distur	bed? Are "Normal	Circumstances"	present? Yes V No No			
Are Vegetation, Soil,	or Hydrology	naturally problemate	atic? (If needed, e	explain any answe	ers in Remarks.)			
SUMMARY OF FINDINGS -	Attach site n	nap showing san	npling point locatio	ns, transects	s, important features, etc.			
Hydrophytic Vegetation Present?	Yes	No. V						
Hydric Soil Present?	Yes		Is the Sampled Area	<b>V</b> = =	N			
Wetland Hydrology Present?	Yes	No V	within a Wetland?	Yes	No			
Remarks:								
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one	is required; chec	k all that apply)		Surface Soil	Cracks (B6)			
Surface Water (A1)		True Aquatic Plants (		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	_	Hydrogen Sulfide Od		Drainage Patterns (B10)				
Saturation (A3)			es on Living Roots (C3)	Moss Trim L				
Water Marks (B1)		Presence of Reduced		Dry-Season Water Table (C2)				
Sediment Deposits (B2)		Recent Iron Reduction						
Drift Deposits (B3)	_	Thin Muck Surface (C		Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)		Other (Explain in Rer	narks) Stunted or Stressed Plants (D1) Geomorphic Position (D2)					
Iron Deposits (B5) Inundation Visible on Aerial Ima	igeny (R7)			Shallow Aqu				
Water-Stained Leaves (B9)	igery (B7)				aphic Relief (D4)			
Aquatic Fauna (B13)				FAC-Neutral Test (D5)				
Field Observations:								
	No 🗸	Depth (inches):						
Water Table Present? Yes	No V	Depth (inches):						
	_	Depth (inches):		lvdrology Presei	nt? Yes No			
(includes capillary fringe)								
Describe Recorded Data (stream ga	luge, monitoring	well, aerial photos, pre	evious inspections), if ava	ilable:				
Remarks:								

Sampling	Point: W-H9 U	JPL
Jannonna	I Ullil	

A	0.01	Absolute	Dominant	Indicator	Dominance Test worksheet:		
2	Tree Stratum (Plot size: 30")	% Cover	Species?	Status	Number of Dominant Species		
Species Across All Sireta: 5 (B)  4.	1				That Are OBL, FACW, or FAC	:	(A)
Species Across All Strata: 5 (B)  4.	2				Total Number of Dominant		
That Are OBL, FACW, or FAC: 0 (A/B)	3					5	(B)
That Are OBL, FACW, or FAC: 0 (A/B)	4				Percent of Deminant Species		
Prevalence Index worksheet:	5					: 0	(A/B)
Total (Cover of:	6						. ,
Soling/Shrub Stratum (Plot size: 15   15   15   15   15   15   15   16   16	7						
Sapling/Shrub Stratum (Plot size: 15'   1. Rubus allegheniensis   10							
Rubus allegheniensis		20% of	total cover:	0			
2	Sapling/Shrub Stratum (Plot size: 15' )						
Second multiflora   Seco		10		FACU_	· ·		
Column Totals:	2. Rubus odoratus	10		<u>UPL</u>	FACU species	x 4 =	_
Prevalence Index = B/A =	3. Rosa multiflora	5		FACU_	UPL species	x 5 =	_
Prevalence Index = B/A =	4				Column Totals:	(A)	_ (B)
Hydrophytic Vegetation Indicators:   1 - Rapid Test for Hydrophytic Vegetation					5		
7. 8. 9. 9. 1. Applied Test for Hydrophytic Vegetation 2. 5. 1. Applied Test for Hydrophytic Vegetation 2. 2. Dominance Test is >50% of total cover: 12.5 20% of total cover: 5. 1. Plantago lanceolata 5							=
8.							
9.			-		1 <u> </u>		
Solid Cover   12.5   25   = Total Cover   20.9 of total cover:   5   4   Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)   1. Plantago lanceolata   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   5   V   UPL   data in Remarks or on a separate sheet)   2. Lycopodium digitatum   4   Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)   2. Lycopodium digitatum   4   Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)   2. Lycopodium digitatum   4   Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)   2. Lycopodium digitatum   4   Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)   2. Lycopodium digitatum   4   Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)   2. Lycopodium digitatum   4   Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)   2. Lycopodium digitatum   4   Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)   2. Lycopodium digitatum   4   Morphological Adaptations' (Provide							
Herb Stratum (Plot size: 5' )   1, Plantago lanceolata	J	25	Total Cov		<del></del>		
Herb Stratum (Plot size: 5'   1, Plantago lanceolata   5	50% of total cover: 12.5				4 - Morphological Adaptati	ions¹ (Provide sup	porting
1. Plantago lanceolata 2. Lycopodium digitatum 3. Poa sp. 4. Verbascum thapsus 5. V	E!	2070 01	total cover.		data in Remarks or on	a separate sheet)	
2. Lycopodium digitatum 3. Poa sp. 4. Verbascum thapsus 5. Verbascum thapsus disturbed or problematic.  Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub - Woody plants, excluding vines, 1ess than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft in height.  Woody vine - All woody vines greater than 3.28 ft in height.  Vody vine - All woody vines greater than 3.28 ft in height.  Vegetation Present? Yes No	Tierb Gratarii (1 lot 3126.	5	<b>/</b>	LIDI	Problematic Hydrophytic \	egetation <sup>1</sup> (Expla	in)
3. Poa sp. 4. Verbascum thapsus 5							
4. Verbascum thapsus  5. FACU  5. FACU  6. Tree — Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  5. Sapling/Shrub — Woody plants, excluding vines, as in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  5. Sapling/Shrub — Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  11							nust
Definitions of Four Vegetation Strata:  Tree — Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub — Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Woody Vine Stratum (Plot size: 15')  1					be present, unless disturbed o	r problematic.	
6	· ''		-		Definitions of Four Vegetation	on Strata:	
nore in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 15' )  1					Tree – Woody plants, excluding	a vines 3 in (76	cm) or
8	6						
9	7				height.		
9	8				Sapling/Shrub – Woody plant	s. excludina vines	. less
11	9				than 3 in. DBH and greater tha		
20	10	-	-		m) tall.		
20	11				Herb - All herbaceous (non-we	oody) plants, rega	rdless
Woody Vine Stratum (Plot size: 15' )  1.					of size, and woody plants less	than 3.28 ft tall.	
Moody Vine Stratum (Plot size: )  1		20% of	total cover:	4	Woody vine – All woody vines	greater than 3.28	R ft in
2	Woody Vine Stratum (Plot size:)					9	
3	1						
4	2		-				
5	3						
5	4				Hydrophytic		
50% of total cover:	5						
Remarks: (Include photo numbers here or on a separate sheet.)  ND- Not Determined		0	= Total Cov	er	Present? Yes	No <u> </u>	
ND- Not Determined	50% of total cover:0	20% of	total cover:	0			
	Remarks: (Include photo numbers here or on a separate s	heet.)					
Vegetation not ID'd down to species level is not included in the dominance test.	ND- Not Determined						
Vegetation not ID'd down to species level is not included in the dominance test.							
	*Vegetation not ID'd down to species level is not	t included	d in the do	ominance	e test.		

SOIL Sampling Point: W-H9 UPL

Profile Desc	ription: (Describe t	to the depth	needed to docun	nent the i	ndicator	or confirm	the absen	ce of indicators.)
Depth	Matrix		Redo	x Features	3		_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	<u>Remarks</u>
0-24"	10yr 4/4	100					SL	
					-			
·								<u> </u>
					-			_
					-			
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM=Re	educed Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Ind	icators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Be	low Surfac	ce (S8) <b>(N</b>	ILRA 147,	148)	Coast Prairie Redox (A16)
Black Hi			Thin Dark Su			47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)			Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat					(MLRA 136, 147)
	ick (A10) <b>(LRR N)</b>	. (111)	Redox Dark S				_	Very Shallow Dark Surface (TF12)
	d Below Dark Surface ark Surface (A12)	(A11)	Depleted Dar Redox Depre				_	Other (Explain in Remarks)
	fucky Mineral (S1) <b>(L</b>	RR N	Iron-Mangan			RR N		
	A 147, 148)	,	MLRA 13		30 (i 12) <b>(</b> i			
	Gleyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	<sup>3</sup> I	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
Stripped	Matrix (S6)		Red Parent N	faterial (F	21) <b>(MLR</b>	A 127, 147	7)	unless disturbed or problematic.
Restrictive I	Layer (if observed):							
Type:			_					
Depth (inc	ches):		_				Hydric S	oil Present? Yes No
Remarks:							1	

Project/Site: MVP City/County: Franklin Sampling Date: 04/02/2							
Applicant/Owner: MVP		State: VA	Sampling Point: W-H6				
Investigator(s): A.Stott, A. Grech, H. Heist	Section, Towns	hip. Range: N/A	۸	_ ,			
Landform (hillslope, terrace, etc.): Valley bottom				Slope (%): 0-3%			
Subregion (LRR or MLRA): LRRN Lat							
Soil Map Unit Name: Clifford fine sandy loam, 8		-					
Are climatic / hydrologic conditions on the site typical fr				·			
	•			oresent? Yes No			
Are Vegetation, Soil, or Hydrology			·	<u> </u>			
Are Vegetation, Soil, or Hydrology SUMMARY OF FINDINGS – Attach site n			plain any answe				
			is, transcots	, important reatures, etc.			
Hydrophytic Vegetation Present? Yes	Is the Sa	ampled Area					
Hydric Soil Present?  Yes  V	willilli a	Wetland?	Yes	No			
Wetland Hydrology Present? Yes	No						
Remarks: Cowardin Code: PEM HGM: riverine WT:	RPWWD						
Information listed on this form represents the of wetland hydrology, hydrophytic vegetation Supplement delineation methodology.	ne data collected in 2015. on, and hydric soils was contact to the	The wetland onfirmed usir	was revisited ng the USACE	on 11/13/2019. Presence E EMP Regional			
HYDROLOGY							
Wetland Hydrology Indicators:		_		tors (minimum of two required)			
Primary Indicators (minimum of one is required; chec	k all that apply)		Surface Soil	Cracks (B6)			
\ <del></del>	True Aquatic Plants (B14)	-		getated Concave Surface (B8)			
· · · · · · · · · · · · · · · · ·	Hydrogen Sulfide Odor (C1)	=	Drainage Pa	, ,			
	Oxidized Rhizospheres on Livin		Moss Trim Li				
	Presence of Reduced Iron (C4)			Water Table (C2)			
	Recent Iron Reduction in Tilled	Soils (C6)	Crayfish Buri	` '			
	Thin Muck Surface (C7)	-		sible on Aerial Imagery (C9)			
	Other (Explain in Remarks)	_		tressed Plants (D1)			
Iron Deposits (B5)		_		Position (D2)			
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)					
Water-Stained Leaves (B9)		Microtopographic Relief (D4) FAC-Neutral Test (D5)					
Aquatic Fauna (B13)		<del></del>	FAC-Neutral	Test (D3)			
Field Observations:  Surface Water Present?  Yes No	Denth (inches): 1"						
Water Table Present? Yes V No							
	Deptif (inches)	NAV - 41 - 11 - 11 11 11		10 Yes W No			
Saturation Present? Yes No	Depth (inches): 0"	Wetland Hy	drology Presen	t? Yes <u>V</u> No			
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous insp	ections), if availa	able:				
Remarks:							
Troniano.							

_			W LIC
Samo	lina	Point:	44-HQ

,	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species		
1				That Are OBL, FACW, or FAC: 2 (A)		
2				(*,*		
				Total Number of Dominant Species Across All Strata: 3 (B)		
3				Species Across All Strata:3 (B)		
4				Percent of Dominant Species		
5				That Are OBL, FACW, or FAC: 67% (A/B)		
6				Prevalence Index worksheet:		
7						
	0	= Total Cov	er	Total % Cover of: Multiply by:		
50% of total cover: 0	20% of	total cover:	0	OBL species x 1 =		
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =		
1. Rosa multiflora	10	<b>✓</b>	FACU	FAC species x 3 =		
2.	-			FACU species x 4 =		
				UPL species x 5 =		
3				Column Totals: (A) (B)		
4				Column rotals: (//) (b)		
5		. ———		Prevalence Index = B/A =		
6		· <u></u>		Hydrophytic Vegetation Indicators:		
7	-	. <u></u>		1 - Rapid Test for Hydrophytic Vegetation		
8	-			2 - Dominance Test is >50%		
9.						
	10	= Total Cov	er	3 - Prevalence Index is ≤3.0¹		
50% of total cover:5		total cover:		4 - Morphological Adaptations <sup>1</sup> (Provide supporting		
Herb Stratum (Plot size: 5' )				data in Remarks or on a separate sheet)		
1. Carex Iurida	30	<b>✓</b>	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
2. Juncus effusus	25	<u> </u>				
			F <u>ACW</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must		
3. Impatiens capensis	15	· <del></del>	FACW_	be present, unless disturbed or problematic.		
4. Persicaria saggittata	15		OBL	Definitions of Four Vegetation Strata:		
5. Eupatorium perfoliatum	10		F <u>ACW</u>			
6. Lycopus americanus	5		OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or		
7. Poa trivialis	5		FACW	more in diameter at breast height (DBH), regardless of height.		
8	-					
				Sapling/Shrub – Woody plants, excluding vines, less		
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.		
10				iii) taii.		
11	405	· ——		Herb – All herbaceous (non-woody) plants, regardless		
50.5		= Total Cov		of size, and woody plants less than 3.28 ft tall.		
50% of total cover: <u>52.5</u>	20% of	total cover:	21	Woody vine – All woody vines greater than 3.28 ft in		
Woody Vine Stratum (Plot size: 15')				height.		
1		·				
2						
3						
4						
				Hydrophytic		
5	^	<del></del>		Vegetation Present? Yes ✔ No		
500/ of total annual 0		= Total Cov	_	100 <u>100 100 100 100 100 100 100 100 100</u>		
50% of total cover:0		total cover:				
Remarks: (Include photo numbers here or on a separate s	heet.)					
ND- Not Determined						
*Vegetation not ID'd down to species level is no	t include	d in the do	ominanc	e test.		
·						

SOIL Sampling Point: W-H6

Profile Desc	ription: (Describe to	the depth r	needed to docun	nent the i	ndicator	or confirm	the absen	ce of indicators.)				
Depth	Matrix			k Feature								
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks				
0-10"	Gley1 4/10y	98	7.5YR 4/4	2	RM	М	L					
10"+						- · ·		Refusal cf				
					-							
	·											
			_		-							
	-											
	oncentration, D=Deplet	tion, RM=Re	duced Matrix, MS	S=Masked	I Sand Gr	ains.		PL=Pore Lining, M=Matrix.				
Hydric Soil	ndicators:						Ind	licators for Problematic Hydric Soils <sup>3</sup> :				
Histosol	(A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)				
Histic Ep	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) <b>(</b>	MLRA 147,	148)	Coast Prairie Redox (A16)				
Black Hi	stic (A3)	-	Thin Dark Su	rface (S9)	(MLRA	147, 148)		(MLRA 147, 148)				
Hydroge	n Sulfide (A4)	-	Loamy Gleye	d Matrix (	F2)			Piedmont Floodplain Soils (F19)				
Stratified	l Layers (A5)	-	Depleted Mat	rix (F3)				(MLRA 136, 147)				
2 cm Mu	ck (A10) (LRR N)	-	Redox Dark S					Very Shallow Dark Surface (TF12)				
	l Below Dark Surface (	(A11)	Depleted Dar					Other (Explain in Remarks)				
	ark Surface (A12)	-	Redox Depre									
	lucky Mineral (S1) <b>(LR</b>	R N,	Iron-Manganese Masses (F12) (LRR N,									
	147, 148)		MLRA 130	-			2					
	leyed Matrix (S4)	-	Umbric Surfa					Indicators of hydrophytic vegetation and				
-	edox (S5)	-	Piedmont Flo					wetland hydrology must be present,				
	Matrix (S6)	-	Red Parent M	1aterial (F	21) <b>(MLR</b>	A 127, 147	7)	unless disturbed or problematic.				
	ayer (if observed):											
,	efusal: coarse frag	ments	=									
Depth (inc	ches): <u>10"</u>		_				Hydric S	oil Present? Yes 🔽 No				
Remarks:												



Photograph Direction East

Date: 04/02/2015

Comments: 2015 wetland delineation.



Photograph Direction East

Date: 11/13/19

Comments: 2019 wetland delineation confirmation.

Project/Site: MVP	City/County: Fr	anklin	Sampling Date: 04/02/2015
Applicant/Owner: EQT		State: VA	
Investigator(s): A.Stott, A. Grech, H. Heist			<u> </u>
Landform (hillslope, terrace, etc.): Shoulder-slop	<del></del>		Slope (%): 1-3%
Subregion (LRR or MLRA): LRRN			Datum: NAD83
Soil Map Unit Name: Clifford fine sandy loam			
Are climatic / hydrologic conditions on the site typic			
Are Vegetation, Soil, or Hydrology _	·		
Are Vegetation, Soil, or Hydrology _			
SUMMARY OF FINDINGS – Attach site			
		<u>,                                      </u>	
	No.	ampled Area	
	No within a	Wetland? Yes	No
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:			cators (minimum of two required)
Primary Indicators (minimum of one is required; cl		Surface So	
Surface Water (A1)	True Aquatic Plants (B14)		egetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)		Patterns (B10)
Saturation (A3)	<ul><li>Oxidized Rhizospheres on Livir</li><li>Presence of Reduced Iron (C4)</li></ul>	-	Lines (B16)
Water Marks (B1) Sediment Deposits (B2)	Recent Iron Reduction in Tilled		n Water Table (C2) urrows (C8)
Occument Deposits (B2)	Thin Muck Surface (C7)		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)		Stressed Plants (D1)
Iron Deposits (B5)			ic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aq	` '
Water-Stained Leaves (B9)		Microtopog	graphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutra	al Test (D5)
Field Observations:			
	Depth (inches):		
	Depth (inches):		
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	Wetland Hydrology Prese	ent? Yes No
Describe Recorded Data (stream gauge, monitoring	ng well, aerial photos, previous insp	ections), if available:	
Remarks:			
Remarks.			

#### **VEGETATION** (Four Strata) – Use scientific names of plants.

Sampling Point: W-H6

20'	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' )		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
2				Total Number of Dominant Species Across All Strata: 3 (B)
4		·		Percent of Dominant Species
5				That Are OBL, FACW, or FAC:33 (A/B)
7.				Prevalence Index worksheet:
·-	0	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 0			_	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' )				FACW species x 2 =
1. Rubus allegheniensis	15	<b>~</b>	FACU	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 7.5	20% of	total cover:	3	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5' )				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Andropogon virginicus	25		F <u>ACU</u>	1 Toblematic Hydrophytic Vegetation (Explain)
2. Juncus effucus	20		FACW_	
3. Poa sp.	20		ND	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
20		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 32  Woody Vine Stratum (Plot size: 15' )	<u>5                                    </u>	total cover:	13	Woody vine – All woody vines greater than 3.28 ft in height.
1				
2				
3				
4				Hydrophytic
5	^			Vegetation Present? Yes No ✔
50% of total cover: 0		= Total Cov total cover:		1163EIR: 163 NO
Remarks: (Include photo numbers here or on a separate s		10101 00701		
ND - Not Determined.	sileet.)			
THE POLICIAL MAGE				
Poa sp. not used in Dominance Test because it	could no	t ha idant	ified to c	enocios
in oa sp. not used in Dominance rest because it	. could 110	r be lutill	60 10 8	prodos.

Sampling Point:	<u>W-H</u> 6
-----------------	--------------

3
,
-
х.
x. Hydric Soils³:
. 147)
6)
")
s (F19)
o (i .o)
ce (TF12)
(S)
egetation and
e present,
matic.
No